



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

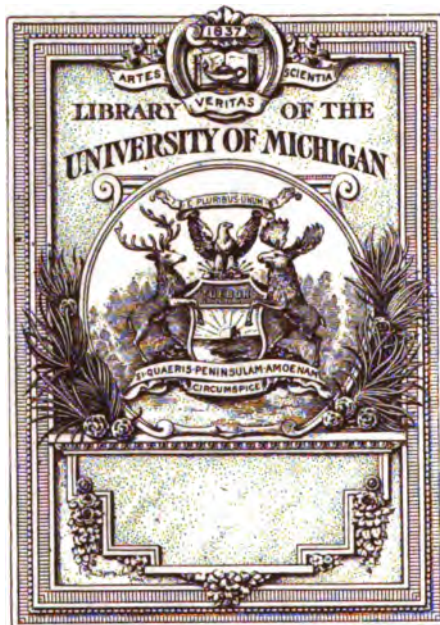
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

**B** 430015





TR

1

A49

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text suggests that organizations should implement robust systems to track every aspect of their operations, from procurement to sales.

2. The second section addresses the challenges of data management in a rapidly changing environment. It highlights the need for flexible and scalable solutions that can adapt to new technologies and data sources. The author argues that organizations must invest in training and development to ensure their staff are equipped to handle complex data sets and analyze them effectively.

3. The third part of the document focuses on the role of leadership in driving organizational success. It stresses that leaders must be visionaries who can inspire and motivate their teams. The text provides several examples of successful leaders who have transformed their organizations through strategic vision and effective communication. It also offers practical advice on how to develop leadership skills and foster a culture of innovation.

4. The fourth section discusses the importance of collaboration and teamwork in achieving organizational goals. It argues that no single individual can succeed in today's complex business environment; instead, organizations must leverage the strengths of their entire workforce. The text provides strategies for building cohesive teams, resolving conflicts, and promoting a spirit of collaboration across all levels of the organization.

5. The fifth and final part of the document concludes with a call to action, urging organizations to embrace change and innovation. It reminds readers that the only way to stay competitive in a global market is by continuously evolving and improving. The author ends with a powerful statement: "The future belongs to those who prepare for it today."

THE  
American  
<sup>1242</sup>Amateur Photographer  
and  
Camera and Dark Room

VOLUME XIX

JANUARY-JUNE 1907

---

*Edited by*

DR. JOHN NICOL  
F. R. FRAPRIE

FREDERICK C. BEACH  
J. P. CHALMERS

---

1907

The American Photographic Publishing Co.  
NEW YORK, N.Y.

---

Copyright, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING CO., New York, N. Y.  
All Rights Reserved



## TABLE OF CONTENTS.

<b>A</b>		Home-Made Backgrounds .....	55
A Substitute for Platinotype.....	147	How to Make a Platinum Paper for Water Development. Jarman .....	96
About Exposure and Color Screens.....	219	How to Make a Single Transfer Carbon Print .....	310
Advantages of Local Plane Shutter for Other Than High Speed Work.....	211	<b>I</b>	
After Treatment of Negatives.....	210	International Photographic Show.....	165
Aluminum, Carbon Prints on. Jarman...	19	<b>L</b>	
American Lantern Slide Interchange.....	78	Lantern Slides, Coloring of.....	262
Answers to Correspondents.		<b>M</b>	
Photographs on Fruit.....	336	Magnifier with Fixed Focus Camera.....	173
Intensifying Platinum Prints.....	240	Making Up Solutions.....	171
Photographing a Show Window.....	191	<b>N</b>	
Retouching Pin Holes.....	192	Needed Revision of Development Formula. ....	306
Tank Development .....	192	<b>O</b>	
Squeezing Prints .....	79	Oil Printing Process.....	220
Making the Best of a Thin Negative.....	80	Ordinary Room Portraiture.....	305
Developing for Density.....	335	Our Competition .....	46, 122, 167, 224, 278, 323
Reliable Exposure Guides.....	336	Our Portfolio .....	61, 127, 178, 226, 280, 326
Art of Coloring Photographs. Savery...83,	152	Our Table .....	74, 189, 238, 269, 332
Art, Some Rules in.....	259	<b>P</b>	
Art Terms Explained. J. P. Chalmers....	11	Photo Secession Exhibition.....	9
Automatic Development .....	116	Photography at Greenwich Observatory.....	58
Avoiding Granularity in Copying.....	50	Plane Development .....	103
<b>B</b>		Platinum Paper for Water Development, How to Make. Jarman.....	96
Ballade of the Gummist.....	170	Portland Camera Club Exhibition.....	291
Bleaching Engravings for Photographing...	263	Preservative for Sodium Sulphite.....	175
Boston Camera Club Exhibition.....	243	Preserving Glass Negatives.....	300
Buffalo Camera Club Exhibition.....	195	Printing in Clouds on Bromide Paper.....	115
<b>C</b>		Prize Competition .....	46, 122, 167, 224, 278, 323
Carbon Prints Upon Aluminum. Jarman..	19	<b>S</b>	
Carbon Printing in Single Transfer.....	310	Screened Plates for Process.....	101
Clouds, Printing in on Bromide Paper....	115	Snap Shots at Snow Landscapes.....	157
Color Contrasts, Rendering of.....	105	Society News .....	78, 139, 186, 286
Coloring Lantern Slides.....	262	Sodium Sulphite Preservative.....	175
Coloring Photographs. Savery...83,	152	Soft Bromide Prints from Hard Negatives..	104
Concerning the Glycerine Process.....	113	Some Rules in Art.....	259
Copyrighting a Photograph.....	111	Substitute for Platinotype. Jarman.....	147
Critical Focusing .....	99	<b>T</b>	
<b>D</b>		The Focal Plane Shutter. Claudy.....	202
Definitions of Art Terms. J. P. Chalmers..	11	The Photo Secession Exhibition.....	9
Depth of Field.....		The Rendering of Color Contrasts.....	105
Development. B. H. Allbee.....	161	The Two Annals—A Contrast.....	110
Doing Things in the Dark Room. Claudy..	107	The Working of Gas Light Papers.....	250, 307
<b>E</b>		Third American Salon. F. R. Fraprie....	21
Exposure. B. H. Allbee.....	57	Three Color Tissue Process.....	216
<b>F</b>		Trade Notes .....	76, 188
Firelight Effects by Daylight.....	175	Tweezers for Handling Paper.....	169
Focal Plane Shutters. C. H. Claudy.....	202	<b>U</b>	
Focusing and Depth of Focus.....	317	Use of a Telephoto Lens.....	287
Focusing, Critical .....	99	Use of the Magnifier With Fixed Focus Camera .....	173
<b>G</b>		<b>V</b>	
Gas Light Papers, Working of.....	250, 307	Vignette Negatives .....	55
Genre Pictures. Miss Partridge.....	90	<b>W</b>	
Glycerine Process of Development.....	113	Water Developed Platinum Paper.....	96
Green Tones on Bromide Paper.....	175	Winter Time Photography. C. H. Claudy..	15
<b>H</b>		Words from the Watch-Tower.....	39, 118
Hint on Composition.....	56	Working of Gas Light Papers.....	250, 307
Hints to Beginners—Doctoring Negatives...	210		
Hints to Beginners—Exposure Development.	57		
How to Copyright a Photograph.....	111		





# The American Amateur Photographer and Camera and Dark Room.

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co., (Incorporated), 361 Broadway,  
New York.

Address all remittances and business communications to the publishers.  
The contents of this magazine are protected by copyright and all rights reserved.

## EDITORIAL STAFF:

DR. JOHN NICOL, TIoga CENTRE, N. Y.

F. C. BEACH, 361 BROADWAY, NEW YORK CITY.

F. R. FRAPRIE, 6 BEACON STREET, BOSTON, MASS.

J. P. CHALMERS, 361 BROADWAY, NEW YORK CITY.

Vol. XIX.

JANUARY, 1907.

No. 1.

## CONTENTS.

Photo Secession Exhibition—CHAS. H. CAFFIN.....	9
Art Terms Explained—J. P. CHALMERS.....	11
Winter Time Photography—C. H. CLAUDY.....	15
Carbon Prints upon Aluminum—A. J. JARMAN.....	19
Third American Salon—FRANK ROY FRAPRIE.....	21
Words from the Watch-Tower—The WATCHMAN.....	39
Editorial and Publishers' Announcements.....	44
Notes and Comments—Liberal Post Card Laws—Platinum Still Going Up—Society of Color Photographers—Hyperfocal Distance.....	48-50
Letters to the Editors—"Depth of Field"—"Avoiding Granularity in Copying"—"What is Genre?".....	50-54
Readers' Contribution Box—"Vignette Negatives," F. C. Bryant—"Home Made Back- grounds," R. S. Turpin—"Hints on Composition," W. J. Morgan.....	55-56
Hints for Beginners—Exposure—B. H. ALLBEE.....	57
Photography at Greenwich Observatory.....	58
Our Portfolio—By Dr. JOHN NICOL.....	61
Camera and Dark Room Picture Criticism.....	63
Our Table and Book Review.....	74
Trade Notes from Rochester.....	76
Society News—The American Lantern Slide Interchange.....	78
Answers to Correspondents.....	79

## ILLUSTRATIONS.

Pictures by members of the Photo Secession—"Lady in White," E. J. Steichen—"The Light of the World," F. H. Pratt—"Blossom Day," Gertrude Käsebier—"Land- scape," Clarence H. White—"La Cigale," Frank Eugene—"The Parthenon," Myra A. Wiggin—"Intervale: Winter," W. B. Post.....	2-8
Pictures from the Third American Salon—"Arthur W. Dow," Kenneth Alexander—"La Castellane," Eduardo Garonne—"Feeding the Goldfish," J. H. Field—"Decorative Portrait," Sara Holm—"A Maid of the Frontier," Louis Fleckenstein—"Spring- time," Brenda Johnson—"October," Fred Judge—"Landscape," Pierluigi Erizzo—"The Road from Tivoli," W. H. Phillips—"Study in Curves," Emily Pitchford—"The Old Farm in Winter," Gus F. Swenson.....	25-40
Prize Competition Pictures—"87 Years," Will D. Brodhun—"Arithmetic," W. J. Scales.....	71-72

ERRATA.—Page 11, fourth line from bottom, read "mental" instead of "metal."



LADY IN WHITE.

1107

(Member of Photo Secession)

E. J. STEICHEN



THE LIGHT OF THE WORLD

F. H. PRATT

(Member of Photo Secession)

200



BLOSSOM DAY

GERTRUDE KASEBIER

(Member of Photo Secession)

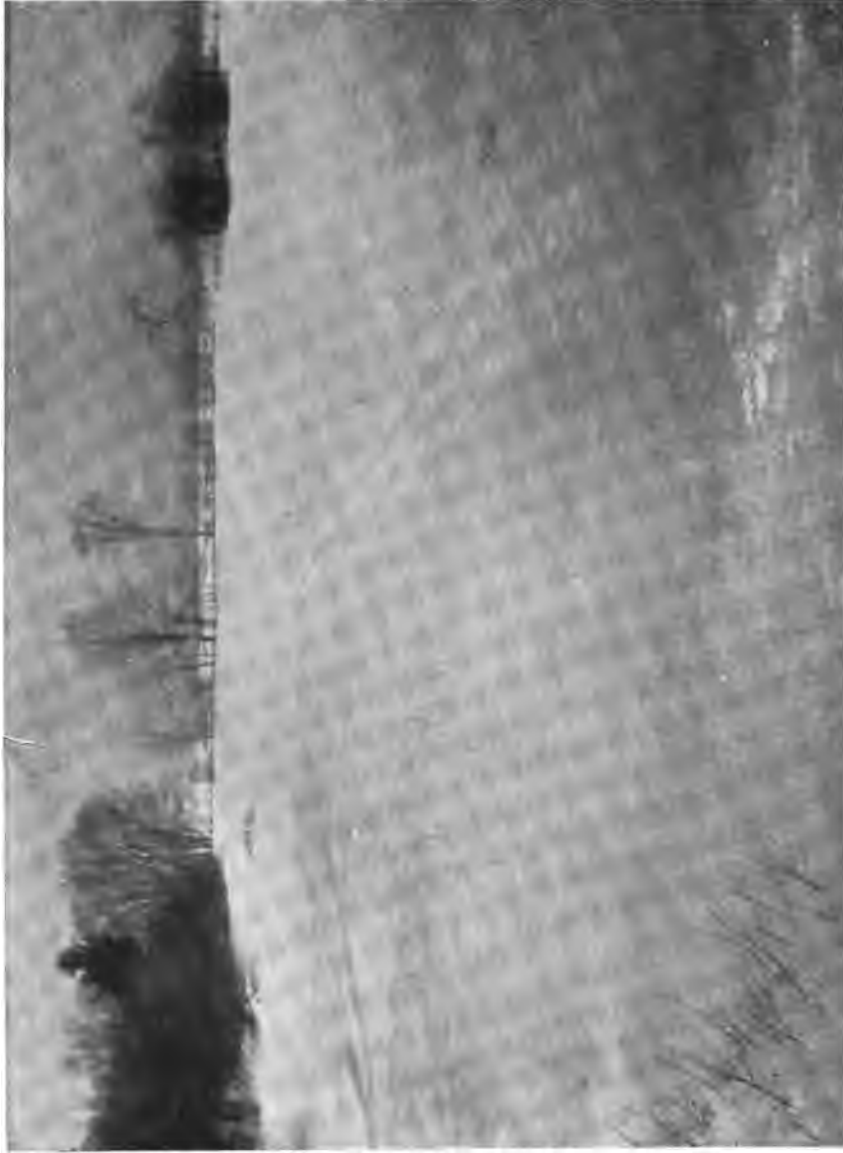


THE PARTHENON

MYRA A. WIGGIN

(Member of Photo Secession)

0000



INTERVALE: WINTER

(Member of Photo Secession)

W. B. Post

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Edited by Dr. JOHN NICOL, F. C. BEACH, F. R. FRAPRIE, J. P. CHALMERS.  
Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

Original manuscript solicited and paid for on publication. New ideas, practical hints and reports of club meetings desired. Matter intended for publication in any number should reach us not later than the 15th of the previous month.

---

Copyrighted, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (All rights reserved.)

---

VOL. XIX.

JANUARY, 1907.

NO. 1

---

## THE PHOTO SECESSION EXHIBITION.

BY CHARLES H. CAFFIN

PEOPLE who are interested in pictures produced by photography cannot afford to ignore the exhibitions of the Photo Secession. In accepting an invitation to review them briefly, I do not forget that a majority of the readers of the AMERICAN AMATEUR PHOTOGRAPHER may not be within the reach of the Little Galleries at 291 Fifth Avenue, so that to make my remarks of value it will be well to lay most stress upon principles and to refer to specific examples chiefly for the purpose of illustrating them. Moreover, as I am to write a series of reviews, I can deal leisurely with one principle at a time.

Now one thing for which the Photo-Secession stands is *quality*. In the first place quality as opposed to quantity. It has set an example of how photographic prints should be exhibited. There are three little rooms, lined with grey drapery, and enlivened with a few bits of pottery or metal work, sufficiently far apart not to interfere with one another, yet the group on each wall, being displayed upon mounts of uniform color and size, counts also as an agreeable ensemble. In the present display there are eighty-three exhibits, quite as many as anybody can reasonably examine at one time. It is easy to have a surfeit of paintings, much easier of photographs, since the latter, being small and restricted also in color, do not make as striking an individual appeal to the eye. Indeed, it is difficult to imagine anyone who has seen the Photo-Secession method of showing prints, whatever he may think of the merits of the individual exhibits, ever again having any use for the tedious confusion of the ordinary photographic exhibitions.



This system of showing comparatively few prints at a time and in such a way that each may receive its due measure of attention is the logical result of insisting upon quality in the print. "And pray," I can imagine someone asking, "what is quality?" Well, it includes about everything that differentiates a picture from a mere record of objective appearances. Here, for example, is a print by Joseph T. Keiley. It represents the view of a woman's shoulder, back, and neck, as she turns her head sufficiently to show the contour of her check. The model has a beauty of form which the poorest photograph could not disguise, but Keiley did not stop at the lines of the figure, he set out to make a "study in flesh tones." He has suggested the beauty of firm and opulent flesh, and, more than this, of the exquisite gradations of light and shadow that lie upon the surface. Thus one loses consciousness of the model in enjoyment of the skill and feeling, exhibited by the artist.

For it is of the union of skill and feeling that quality is born. Feeling is a great deal more than sentiment, it includes the whole attitude of the photographer towards his subject, the extent and kind of study he has given to it, to what extent and in what way he has comprehended it; how it has impressed himself. It is a tell-tale of the kind of man he is. But unless he has the knowledge and skill to surmount the technical difficulties which stand between his feeling and its expression in the print, we may see what he is aiming at but have to deplore his failure. On the other hand, be his mastery over technique never so pronounced, it will not suffice to reconcile one to the absence of feeling. It is true that technical accomplishment carries with it a certain quality; but it is of the kind which simply interests one, and does not stir one's imagination. It has not been fertilized with feeling. There are eggs, admirable for cooking purposes, which, however, from not having been fertilized, will never produce chickens.

For another example of quality I turn to *The Bowl of Water*, by Edmund Stirling; a woman bending over a little mahogany table, which makes a dark spot against the grey wall, her gown is of silk, presumably a pearly grey, in tone not very different from that of the wall on which are a few pictures, offering spots of secondary emphasis. But the problem is not only one of tone but of representing with delicate varieties of distinction the figure and its surroundings. There is no merging of certain parts in shadow; everything is distinctly visible, expressed with a choiceness of feeling that corresponds to the feeling of choiceness in the gesture of the figure. The motive you will observe, is to express a sentiment in terms of artistic quality; and it has been done with a very considerable measure of technical skill.

In four prints, however, by George H. Seeley, there is no such union of skill and feeling. We may detect it in one of his examples, *Edge of the Crystal Bowl* but in the other four his purpose has been to picture allegorical ideas, and he either was more interested in the idea than in its artistic expression, or had not sufficient technical skill to compass the latter.

Similarly in the case of Alvin L. Coburn's prints there is a tendency to let the idea get the better of its expression. Nor has he any excuse in lack of technical skill; with him the case is rather a carelessness of artistic observation. Note, for example, his portrait of Bernard Shaw. The face is admirably treated; a fine piece of character interpretation, excellently wrought out. Yet below the chin appears a hand, the wrist of which is out of drawing, while the arm in appearance is too short. Such a blot on an otherwise beautiful portrait is inexcusable. But a corresponding insufficiency of observation appears in *The Builders*, where the middle distance is unaccounted for, and in the decorative study, *Winter*, in which the character of the tree-trunks and of the delicate growths emerging from the snow, have been inadequately comprehended; with a consequent loss to the print of quality.

Among several studies of the nude I may specially commend *The Source* by Annie W. Brigman. The figure, crouching upon the stony bed of a brook, holds up a vase from which a thread of water falls. The composition of the figure is good, and its relation to the leafy background and to the stones in the foreground, well studied. Not so successful, however, is the lighting of the figure, which exaggerates the muscle strain in one of the knees and gives the flesh a texture but little less hard than that of the stones.

Thus one might pass from print to print noting their respective excellences and deficiencies; and this is primarily the object of the exhibition. It makes no claim to perfection, but to the student of photography, whether professional or lay, offers an opportunity of comparing the results, the successes and partial failures, of a group of men and women whose aim is to extract from photography its utmost possibilities of pictorial expression. It demands a high artistic standard and is continually stimulating the pursuit of one still higher.

---

## ART TERMS EXPLAINED.

DEFINITIONS OF WORDS AND PHRASES USED BY PICTURE CRITICS AND WRITERS ON ART SUBJECTS.

BY J. P. CHALMERS.

REQUESTS from some of the readers of CAMERA AND DARK ROOM for an explanation of the meaning of certain words and phrases used by writers on art subjects suggests to me that a glossary of some of these terms would be especially appropriate for this number. This magazine will hereafter endeavor to provide mental food for all grades of photographers, from the youngest beginner in the art up to the most advanced worker. Among our regular contributors are highly educated men and artists of the brush who, in expressing their thoughts, naturally drift into studio talk and terms that are as

Greek to many people. Therefore, while our kindergarten talks can be skipped without loss by our wiser readers, we want to help every earnest worker and the following definitions of a few art terms that are constantly in use will help younger readers to understand and appreciate the art talks and criticisms by some of our writers:

**ACCENTUATION.** The application of special force upon some particular part of the picture, to lend emphasis or distinguish it from the rest. A strong high light is the usual form of accentuation, also a strong contrast of light and shade or a dark mass, darker than any other part of the picture.

**ATMOSPHERE.** That quality in a picture which separates the various planes and gives the effect of distance.

**BALANCE.** (1) The placing of the parts in a picture so that they bear harmonious relation to each other. For example, a photograph of the banks of a lake or river may yield a very one-sided effect, but if a boat or other object is included in the weak side of the picture, but farther from the centre in proportion to the diminishing size of the object, the effect of balance of the parts is maintained. Balance of light and shade is self explanatory. (2) When the planes of a picture blend into each other harmoniously is another sense in which the term is used. A work of art, to satisfy, must conform to the unwritten law of compensation and show just proportion, symmetry, equipoise and harmonious arrangement in all its parts.

**BREADTH.** The elimination of all unnecessary details.

**CHIAROSCURO.** In painting the art of judiciously distributing the lights and shadows in a picture.

**COMPOSITION.** The constructive and inventive faculties which are necessary to combine the different elements of a work of art into a harmonious whole.

**CONSTRUCTION.** The act of devising and forming the lines and masses in a picture.

**CONTRAST.** The opposition of dark and light tints, of straight and angular lines, etc.

**DECORATIVE.** Suited for embellishment, dependent for its effect on its surroundings, not independent like a painting.

**DETAIL.** Everything in a picture that is of no special importance to carry out the principal point of interest or motif.

**EMPHASIS.** See accentuation.

**FLAT TINT.** A surface of one uniform color, without any gradation.

**FORMAL.** Belonging to the form and external appearance of an object.

**GENRE.** A figure composition that tells a story. Subjects copied from nature or from natural poses. The elaborate studied compositions of the late H. P. Robinson, which are familiar to almost all photographers, down to the modern snap shot of a child in raptures over its new Christmas toys—all are genre pictures, which represent people "doing something" in a natural manner amidst natural surroundings.

**GRADATION.** A gradual passing from one tint or tone to another.

**HARMONY.** The adaptation of parts to each other to produce a pleasing effect.

**IDEA AND CONCEPTION.** Idea pertains to the subject of a picture, conception to the way in which the mind elaborates upon it. Two artists might have vastly different conceptions of the same idea.

**IMPRESSIONISM.** (1) A new method of applying color to the canvas introduced by the French impressionist painters, producing an effect that is simply suggestive or poetical, in contra-distinction to the Vandyke or Dutch school of painting which is strong on detail. (2) A new style of composition that ignores the traditional laws of composition, that endeavors to depict objects as they are seen in nature without any embellishment. In the widest sense the term is used for all works of art that vividly carry out the first impression one obtains from an object.

**KEY.** A picture is in a high key when all its tone values are of a light color, and vice versa. A tone is in the wrong key when it is either too light or too dark for the rest of the picture.

**LINE OF BEAUTY.** Generally referring to Hogarth's line of beauty (a double curve in the form of the letter S), a line that is supposed to express perfect beauty.

**LINEAR.** Pertaining to straight lines.

**MEDIUM.** The materials which are made use of to produce a work of art.

**METHOD AND PROCESS.** Method is the particular manner in which a craftsman handles his tools and vehicles of expression. Process is a method that is more dependent on the vehicles of expression than in the manipulation of the same. A photographer may adopt the Steichen method in working the gum process or the Stieglitz method in working the platinotype process.

**MOTIF.** The theme or subject which is the inspiration or object in making the picture.

**POINT OF INTEREST.** That part in a picture which is most important, and often the reason why the picture is made.

**PAINTER-LIKE QUALITIES.** Technical characteristics in a photograph which resemble the technique of painting.

**PICTORIAL AND PICTURESQUE.** Pictorial means that the subject contains the necessary elements for a picture. Picturesque refers to a particular kind of beauty that is really only a pictorial quality. A subject or scene may be pictorial but lack that peculiar beauty which would class it as being picturesque and which is hard to define.

**PLANE.** A level and flat surface. A picture is generally divided into three planes, the foreground, the distance and the middle distance.

**PROPORTION.** A subject is in good proportion when its different parts are in harmonic relation to each other.

**QUALITY.** Pertaining to the intrinsic merit of a work of art. "The print has quality" means that it is of good workmanship.

**RHYTHM.** Repetition of accent, producing an agreeable effect.

**SELECTION.** Choice of a subject by preference, dependent on knowledge and experience.

**SILHOUETTE.** The outline of a form in black or white that is offset by a white or black background.

**STYLE.** Every painter or photographer who has an *individual* mode of expression may be said to have a style of his own.

**SUBORDINATION.** Making certain parts of a picture inferior to the others.

**SUGGESTIVENESS.** The quality in a picture which makes us imagine things that are not actually represented in the picture. It is often produced by vagueness of form. The so-called fuzzytype has generally the merit of being suggestive (if only of better things).

**SYMMETRY.** The proper relation of several parts to each other, particularly when one side of the picture is a repetition of the other (as it is generally the case in architecture).

**TECHNICS AND TECHNIQUE.** The skill which a man displays in handling his tools or materials; the painter his brush and colors, the photographer his lens, chemicals and printing mediums. In a broader sense it is applied to express the ability, emotional and mental as well as mechanical, to produce a work of art.

**TEXTURE.** The surface appearance and structure of objects; in art the term is used to characterize the surface appearance of the picture.

**TONE. TONALITY.** The relation of the colors in a painting; in photography the rendering of color values in light and shade. The term is also used to denote the characteristic expression of a picture, as distinguished by its color. We may say of a picture "It has fine tonal quality," or we may label it, "A Study in Tone;" the first is simply more or less good technic, in the second the artist has taken for his *motif* the subtle and harmonious rendering of tone values.

**TOUCH.** Something produced by the touch of the hand. For instance in speaking of a well known worker in the platinum-glycerine-development method we say "his touch is very light."

**TRANSITION.** Very much the same as gradation.

**UNITY.** To combine the different elements of a picture in such a way as to produce a pleasing effect and to give the sense of repose, simplicity, strength and concentration.

**VALUES.** The eye perceives nature in colors. The colors are of different intensity. When a subject is reproduced in black and white (monochrome) the values are correct when the objects depicted carry out in dark and light gradation the same relation of intensity that they have when seen in color. Values are always dependent in their relation to other parts and to the whole.

## WINTER TIME PHOTOGRAPHY.

BY C. H. CLAUDY.

THERE is a disposition on the part of certain would-be instructors in photography to make the proper rendition of winter scenes seem both difficult and mysterious, while as a matter of fact, it is no more a task to properly render winter, snow, and bare trees, than it is to show the same scene, properly rendered, in summer time. The "secrets" so-called are the same which govern the making of a true rendering of any scene—proper plate, proper exposure, and proper development.

The plate should be an orthochromatic one. That is, the plate should be as sensitive to various color values as possible. It may seem that this is more important in summer than in winter, but such is not the case. In summer there is a greater range of color in the landscape than in winter. Consequently with any plate, there will be a greater range of tones than in photographing the same scene in winter, using "range of tones" to mean number and quality, rather than scale from dark to light. A plain plate in summer time, will therefore, give this greater range to some extent, while in winter scenes, the range may be limited to two or three tones. That is the trouble with nine out of ten winter scenes—there is white paper for snow, black shadows for trees, and a middle tone for everything else—and such a photograph does not satisfy.

Now an orthochromatic plate, other things being equal, will record in several tones what the plain plate renders as one, and, as there are less tones to catch in a winter scene, it is all the more important to get all that are possible. I am not belittling the need of an orthochromatic plate for summer time photography, but emphasizing its need in winter. As a matter of opinion, I believe the orthochromatic plate should be used all the time, for everything except line copies, but particularly in winter.

The plate is the better which is non-halation. In summer it is needed to cut off the halation through and around foliage, particularly with a bright sky, but in winter, while the bright sky is not at hand—or at least not often, the non-halation quality is a requirement to keep down the halation of snow, ice and snow on black tree trunks. The plates, which are double-coated, are fine for this purpose, but I have seen equally good results from a single coated orthochromatic plate, backed. Backing is a bother—there is no denying it—but some kinds are worse than others. If I had to smear a combination of glue and paint over the back of every plate I used I would quit the game. The trouble is more than the picture is worth. But black paper backing, attached with a glycerine compound, to be purchased of manufacturers, while troublesome, is not so messy, and it effectually prevents halation. A double coated, orthochromatic, non-halation plate, backed, is the ideal one for winter work.

Now for the questions of exposure. "Proper" exposure is what is wanted, but what is "proper" in this connection? Obviously, that exposure, which, with a given development, will preserve the tones as seen in nature, render high lights and shadows both with detail, and render them so they will print.

Let us examine the subject in sections. We have a plate, such as described and are going to photograph a clump of trees, snow covered, with snow on the ground around them, a leaden sky and foot tracks in the snow. We stop down to U. S. 64 and give half a second. On developing the plate we find just about three tones—a blocked up portion for snow—with very faint detail where the tracks are in the snow, a middle tone for the sky and practically clear glass for the tree trunks. The print is disheartening, ugly and a waste of time and effort.

The development has been what I will call standard—that is, with a normal solution at a normal temperature, for a normal time.

On the same scene we now expose a new plate, giving three times the exposure. Development shows the same result as before, with the exception that there is greater density and a little more detail in the high lights—and faint detail in the trees. Here is what we are looking for. We want detail. But we don't want density.

Exposing another plate the same time, one and one-half seconds, we develop with the same solution, diluted one-half, and for the same time. We now have a thinner plate—not quite so much detail as the second effort, but a great improvement on the first effort. And our problem is solved as far as exposure goes. We must expose, expose again, and again expose, if we want to render a scene in which is much contrast, and retain the detail.

So now we take a plate and expose four seconds at U. S. 64, or even more. We develop in a three times diluted developer at a normal temperature until we think the density of the highest highlight is just so that it will print. Then we fix, and what do we find? We have a thin, contrastless (comparatively speaking) plate, with plenty of detail in the snow and plenty of detail in the tree trunks. And the philosophy is simple. The over exposure of the snow would be swallowed up in a strong development, yet a normal development of a "normal" exposure would not get out detail in the shadows, and in the dark tree trunks. The long exposure has impressed all the detail on the plate, and the weak development has cut down the contrast while yet the detail in the shadows has come out. The long exposure developed in a strong solution would print, too, and not such a bad print, either, but it would be too dense for any satisfaction in working it.

Elsewhere I have emphatically stated my belief in tank development, and my conviction that a normal development for a normal time is best for all exposures. But I put in the saving clause that knowledge of unusual conditions in exposure would modify this, and that a specially prepared developer for such abnormal exposures is indicated. Now, this is a case where we have purposely

and of malice aforethought, over exposed, that is given such an exposure that a normal development would block up the plate to such density that printing would be difficult. So a modified developer for such a plate is in no-ways a contradiction of what I have stated elsewhere.

Now, as to the character of the developer. I am personally a pyro user. But I know of a whole host of other developers which do splendid work in the hands of those familiar with them. One reason I prefer pyro is the color which can be given to the negative, the degree of stain greatly affecting the contrast of the negative. So when I want to cut down contrast in a known instance, the sulphite can be increased, and when contrast is wanted, decreased. The amount of yellow stain is directly proportional to two things—the amount of sulphite, and the time of development. Yes, I know the temperature of the developer has a lot to do with it, but I am assuming a constant temperature of say 65 degrees F. in these experiments. So in the snow scenes under discussion, where we wish to cut the contrast down as much as may be, we increase the normal amount of sulphite in the pyro formula by a certain per cent., say twenty per cent.

As stain is in a way proportional to temperature, we might accomplish a similar result by raising the temperature of the developer, but this would upset all our other calculations and give false values of contrast itself. Temperature has so much more to do with proper development than many realize; only those who have taken the trouble to compare results of similar exposures with identical developers developed at different temperatures will appreciate the importance. I believe in having a thermometer handy, and I believe in using it. The temperature need not be exact to a degree—almost anywhere between sixty and seventy will give good results, but as near one temperature as possible, all the time will enable you to get the best results from a knowledge of how to control your development.

I suppose I am being queried as to why, believing as I do in tank development, I should talk so much about "control." But I have never said I do not believe in control in development, nor do I know of anything in tank development which precludes the possibility of control. What I do maintain and which contention is supported by evidence from the master minds in photographic chemistry is that no juggling of the developer can "control" the result in a developing plate, providing such juggling is resorted to after the developer has been flowed on the plate, with the single exception that such juggling, by altering the time of development, may alter the result. But the same alteration would take place by altering the time without the juggling of the addition (and subtraction, by dilution) of the various constituents of the developer. And finally, no juggling is worth anything unless it takes place with a known exposure, and, with a known exposure, all the modifications of the developer can and should be made before the plate is subjected to the action of the reducer at all.

You will observe, that in the same manner that when the magician on the stage shows you how a trick is done, you have no respect for the doing it as a



mystery, so now, that you know the "secrets" of proper rendition of winter scenes, you are inclined to say "how simple!" And it is simple, just as simple as any other photography. It is no more difficult to give plenty of time on a proper plate and develop for a thin flat negative full of detail, than it is to give less time, on a plain plate and a strong "normal" development. But just because many are used to one method of procedure for the scenes they photograph eight months in the year, they find it difficult to alter their methods for the remaining four months when the conditions are entirely different. And thus you hear beginners, and even older photographers raving over properly rendered snow scenes, and talking about the cleverness of the operator and his ability to do mysterious things with plate and paper when all the time he has simply mastered a principle of which the talkers are ignorant.

Now, a final word. Nothing in this or any other article of mine must be construed as belittling the ability of those who can make beautiful snow pictures. With all the technical skill in the world, you may fail to reach your ideals, and fail to produce snow scene masterpieces. There is that quality of mind, and that artistic education which allows one man to see and render beauty in what to another is commonplace, and no altering of exposure or developer will allow the one to come up to the standard of the other. Two men may have equal manual skill with tools, in making chairs and tables, yet one may know how to carve and the other not. You and I may be able to make equally good *photographs*, pure and simple, of a snow scene, and make them as perfect, photographically, as they can be made, but we may both utterly fail to get that quality of picturesqueness, of pictorial atmosphere, that our brother photographer across the way, wins his medals with. Yet if you possess the artistic ability, you are still helpless before your masters, if you do not also possess the technical knowledge of how to render the actual values in the scene before you.

Of this side of the question the artists write, and before them, as gratefully as may be, I take a back seat. I am not, worse luck, an artist, and often but an indifferent photographer, but as far as rendering winter scenes as pictures, it is the lack of the artistic perception and not a failure to appreciate the simple principles laid down above, which prevents my being, and possibly, your being, a good pictorialist.

---

This magazine is for the dissemination of reliable photographic information, and, as such, is open to every reliable manufacturer of photographic supplies to make known his wares. We ask our readers to patronize our advertisers and our warrant for this is a guarantee of a fair deal. If at any time a reader complains to us of unfair treatment we will do our best to right the matter and if repeated, the advertiser will be excluded from our pages.

To the casual reader we would say that his club library only subscribes to this periodical for reference purposes. Order YOUR OWN copy regularly from your dealer or wisely invest in a year's subscription.

## CARBON PRINTS UPON ALUMINUM.

BY A. J. JARMAN.

One branch of the photographic art that appears to lack attention at the present day is the production of photographic novelties upon metal, especially the making of carbon prints upon aluminum. The effect of a carbon print upon the frosted surface of aluminum is equaled only by the same kind of print upon a frosted silver surface, the latter being much more expensive than aluminum. When these beautiful prints are used as souvenirs there is no kind of photograph that can compare with them. The method of production is extremely simple, and any color tissue can be used. A reversed negative is necessary to secure the print in the right position, as the process of obtaining the print upon aluminum is by what is known as single transfer. If the negative employed is a film negative, then there will be no difficulty at all, because the picture can be made by printing through the film from the back.

To obtain these prints proceed as follows: Procure a dozen pieces of carbon tissue 8 x 10. These are usually supplied in different colors. Make up the sensitizing solution for the tissue as described:

Bichromate of potassium (c. p.)	1 1/2 ounces.
Water	50 ounces.
Carbonate of ammonia	30 grains.
Salicylic acid	30 grains.

Dissolve the salicylic acid in a portion of the fifty ounces made hot, and add it after the bichromate has dissolved. The mixture must be filtered through absorbent cotton when it is ready for use.

Pour the mixture into a 10 x 12 clean tray; take one of the sheets of carbon tissue, dip it into the solution face up, and if it curls at all press the edges down into the liquid. It will soon lie flat. Allow it to remain two minutes face up. Then reverse it, and allow to soak face down for one minute, making the time for sensitizing three minutes. Remove the tissue, lay it while still wet down upon a clean sheet of glass, 11 x 14. Place upon the back a piece of India rubber cloth; then hold one end of the cloth with the left hand. Use a 10-inch squeegee by scraping the back of the cloth with some pressure from the left hand over the whole sheet. Then reverse the action, lift the cloth, wipe the back of the tissue and around it with a piece of clean rag. Then lift the tissue at the two top corners, insert two wooden clips, lift the tissue from the glass plate and suspend it in a dark closet away from dust to dry. All these operations may be conducted in a shaded part of the room, away from direct light. If the sensitizing is carried out over night the tissue will be dry by the next morning, ready for use. The drying and cutting up of the tissue must be conducted under an orange-colored light owing to its great sensitiveness,

and when cut placed in an ordinary printing frame under pressure so as to keep it flat and stop curling. A large sheet of blotting paper should be placed beneath the 11 x 14 sheet of glass, so as to absorb any of the bichromate solution that will be pressed out by the squeegee.

The sensitizing solution should be returned to the bottle, as it can be used over several times, four or five times. It must then be thrown away and a fresh solution made.

#### PRINTING THE PICTURE.

If a film is used and the subject is a view, place a piece of clean glass into the printing frame with a strip of black gum paper around the outer edges for about a quarter of an inch all round. This forms what is known as the safe edge. If the negative is a 4 x 5, the print will be  $3\frac{1}{2} \times 4\frac{1}{2}$ . The tissue must be cut 4 x 5, the 8 x 10 piece of sensitized tissue cutting into four. Place the negative into the printing frame, the picture side upon the glass. Lay the tissue down upon this, and close the frame with a good fitting pad upon the tissue. Now fit into another frame a negative of similar quality. Place upon it a strip of ordinary printing-out paper. This is practically a photometer or sensitometer. Place both frames out into the light. Now, as the carbon tissue cannot be examined, the piece of P. O. P. is looked to to tell the tale of exposure. As soon as the paper shows a print about one-third finished, remove both frames as the carbon tissue is printed, it being three times as sensitive as the printing-out paper. If more than one print is to be made proceed in the same manner.

Having several sheets of thin frosted aluminum at hand, which can be purchased already frosted, clean the aluminum by dipping it into a warm solution of common washing soda and rubbing the surface lightly and carefully with a piece of absorbent cotton. Wash the plate well under the faucet, and lay it into clean water ready for use. Now take the printed tissue, dip it into clean cold water (it will curl up quickly face inwards); allow it to soak for a minute or so until it uncurls and lies flat. Now pour over the surface of the aluminum a pool of syrup made by dissolving half a pound of granulated sugar in ten ounces of boiling water and filtered. The aluminum plate may be dipped into this. Then lay the wet carbon print face down upon the aluminum; cover this with a piece of India rubber cloth; use the squeegee as before. Place the aluminum with its adherent tissue aside for a quarter of an hour. If there are more of them, treat them the same way.

As soon as the fifteen or twenty minutes has expired, place the aluminum into a tray of warm water, rock the tray three or four times; then add a small quantity of hot water to that already in the tray (remove the aluminum when doing this). Stir the water, replace the aluminum. It will now be seen that the coloring matter begins to ooze from the edges. Now lift the tissue by one corner from the aluminum by turning it back and parting gently. Throw this material away, rock the tray, lift the aluminum, hold it by the left hand, throw

the warm water over it by the right hand, when it will be seen that a very beautiful print is the result, clean, clear and brilliant. All that is necessary now is to wash the print under a gentle soft stream of water from the faucet, and lay it into a clean alum solution, made by dissolving one ounce of common powdered white alum in sixteen ounces of warm water, and allowed to cool and filtered. Five minutes in this bath will be sufficient. The aluminum plate is then washed by soaking in clean water for a quarter of an hour; then rinsed under the faucet in a gentle stream of water and placed aside to dry away from dust and dirt.

It is advisable to make several of these plates in different colors. Sometimes a large order is secured for such work as this, to be used as souvenirs, amounting to several hundreds. In such a case the developing is done in a grooved box or a grooved grid carrying twenty-four of such plates. In this way a large number can be made in one day.

Should any of the prints be a little overdone they are easily reduced to the desired depth by introducing into the warm developing water a small piece of carbonate of ammonia about the size of a peanut. Allow this to dissolve, and continue the developing until the picture is reduced; then proceed as for the others. These pictures require to be varnished, to protect them from the damp and make them water-proof. This varnish must be quite clear, so as not to degrade the brilliant surface of the aluminum. Amyl acetate collodion is used for this purpose thinned with a small quantity of amyl acetate. The following answers well for the purpose:

Pyroxiline (gun cotton) . . . . . 200 grains.

Amyl acetate (concentrated) . . . . . 5 ounces.

Shake this mixture well and filter through a pledget of washed-out cheesecloth. When filtered it is ready for use.

The plates may be hurried in their drying if necessary by placing them in a warm oven in a small rack or by standing them upon clean blotting paper; or they may be allowed to dry spontaneously.

---

---

## THE THIRD AMERICAN SALON.

FRANK ROY FRAPRIE.

On the evening of January 3, 1907, the Toledo Camera Club will give a reception to open the Third American Salon in the Toledo Museum of Art. The pictures will remain on exhibition here for some time, and will then start on their progress around the United States. The itinerary is not yet completed owing to difficulties in arranging dates in one or two cities, but will be announced when completed. Some six or seven cities will be included.

The judging of the pictures was done early in December, at the rooms of the Pen, Pencil and Camera Club in Pittsburg. The preliminary jury of

photographers first reduced the entries from a large room full to about 600 frames. This jury was supposed to pass only on photographic excellence. A jury of painters, all Pittsburgers with one exception, then eliminated all prints which did not appear to them to be of sufficient artistic merit, and the prints catalogued after this scrutiny amount to about 280 frames.

It is extremely difficult to judge of the general character of an exhibition by handling the prints before they are hung, but my personal impression of the two previous Salons was gathered in the same way, by examining the prints on the floor and while hanging them in Boston, so that I feel justified in making the statement that this Salon compares very favorably with its predecessors. The exhibition is very even in character. There are few outstanding pictures; there are practically no freaks; the standard is that of good, honest photography, true in value, strong in technique, and excellent in composition.

Some of the workers who were conspicuous in former Salons are not represented. Some of the strongest have joined the Photo-Secession, and have ceased to exhibit except under its auspices; some have dropped out through changes in policy and politics in the Federation itself. They are replaced by new names and several of the new-comers show power which, if sustained, will place them eventually high up among American pictorialists.

Two foreign groups are well represented, the Italians and the English. Other foreign countries send only isolated examples. India, South Africa and France are each represented by a single worker.

We append a concise summary of the impressions made by the pictures of each exhibitor:

Gertrude Aitchison is represented by "The Clay Windmill," a good rendition of a subject in itself more unusual than picturesque, and "A Steep Street," a commonplace English street picturesquely portrayed, but lacking in the sense of steepness which it should have to justify its title. Kenneth Alexander's "The Stone Cutters' Blacksmith" represents the dignity of labor well portrayed. His portrait of "Arthur W. Dow" is one of the prints we have chosen for reproduction, and is, perhaps, the best of the half-dozen portraits of painters which are hung. Laura Adams Armer shows only a "Head," but it is enough. It is one of the finest portraits in the exhibition. The modeling of the head is masterly and the composition is excellent. Charles C. Axell is represented with "Mr. A," a portrait well posed, but rather too flat to be wholly pleasing.

Herbert Bairstow, a Nova Scotian and a new worker, has three excellent pieces. "Hauling in the Nets" is a boatload of fishermen full of vigor. "A Vegetable Shop" shows two figures in very unstudied pose, but surrounded by a trifle too much and too insistent architectural detail. Mrs. G. A. Barton's work suffered at the hands of the painters' jury, they holding that it was too open an imitation of early Italian religious paintings, and only two pieces are hung. "St. Ursula" we reproduce, a very picturesque, decorative head. "The Madonna of the Moss Rose" is excellent in feeling and painter-like quality. The child is delightfully unconscious, but the mother appears a shade too indifferent. The decorative arrangement is very pleasing.

Dottore Eugenio Berta is represented by five prints, the inclusion of some of which seems inexplicable. Nos. 13 and 15 are carbons on an orange backing to represent stormy sunsets. The effect is far too violent to be attractive, though the composition shows strength. His other prints all show uncertainty in the treatment of lights, being far too dark at the sides. No. 12 is a striking two-colored gum, but will not bear analysis. Dr. Albert R. Benedict shows two very brilliant street scenes with excellent judgment of opportunity and good quality in higher tones. The shadows of "The Man on the Box" are far too violent, however, indicating under-exposure which can have no artistic justification. The two prints will leave a lasting impression because of their contrasts.

Katherine Bingham's "The Angel of the Darker Drink" is an imaginative composition, well done, but not equal to "Responsibility," a brilliant genre study. Her work shows a gain in strength. Giulio Bompard sends six prints in bright colors, showing artistic feeling in excess of the power to portray. No. 21 is a nice red chalk study, well arranged. No. 25, "L' Aratura," portraying a peasant girl leading several oxen down hill, is strong and realistic in its portrayal of motion. "Canale a Venezia" is an excellent composition which will hold the attention. Too many high lights have been strengthened, however, and the bright reflection is too strong and wrongly drawn.

Fedora E. D. Brown sends "The Hill" reproduced in our September Number, a row of pines silhouetted over a hill-top, and "Shadows on the Sand Dunes," a pleasing arrangement of trees and their shadows on the sunny sand. D. H. Brookins shows four. The strongest is "Transport of Man," which can, however, in both title and treatment, but recall Stieglitz's "The Hand of Man." "Fire Fighters" is an interesting conflagration scene, and "Looking down Quincy Street," a good impressionistic street vista. R. D. Bruce had five prints passed. The most interesting is "Winter Among the Hills," a pleasing little snow-scene. The best of the four by Will D. Brodhun is "The Workers," strong in space composition and of good feeling. Nos. 39 and 40 are unsuccessful arrangements of gigantic figures displayed against an uninteresting background and impress one as snapshots spoiled by intrusive figures in the foreground. "A Believer of Kipling's Heroes" is a nice little portrait with a fanciful title. George Buttler's "Waiting for a Load" is a pleasantly misty harvest scene, well composed.

Rev. H. R. Campion sends "The Beauty and Mystery of Light and Shadows," an excellent technical rendering of architecture without a trace of personal feeling. H. H. Caswell's contribution is "The Road to the Swamp," a conventional winter picture which is rather decorative, but just misses the feeling of real snow. John Chislett exhibits five. "Snow Shadows" is perhaps the best snow picture in the exhibition. The lines are excellent and the brilliant lights have the genuine lustre of snow in sunlight. No. 49, named simply "Landscape" is a gem, the artist having succeeded in infusing real poetry into a well-kept and uncompromising barn, which, with a few trees and genuine atmosphere, make an exceedingly attractive picture. The others are not of especial merit, two of them being decidedly reminiscent of work exhibited in the First American Salon. C. W. Christensen sends two, neither of which is especially strong.

W. Clayden's two marines are both excellent. In "The White Patch," though, the upper and smaller spot of white on the sails should be less staring. C. F. Clarke is represented by "Fun for the Boy," an excellent genre study of a youngster shovelling snow, with the houses in the background charmingly rendered, and a large landscape with a poetic title, "And the Day is Far

Spent." This is a scene of evening quiet, with all lines beautifully arranged to suggest the idea of evening rest. The quality is excellent and the atmospheric rendering perfect. Winfield S. Clime shows five landscapes. "The Cedars" is one of the finest compositions in the exhibition. A masterly arrangement of vertical lines, well rendered in red as a decorative composition. "The Hillside" is a two-colored gum, very decorative. "Evening" and "Cedar Lane" are two different arrangements of the same group of trees, well done technically, but of indifferent interest. "Winter" is very unpleasant, a maze of radiating willow branches, ill defined.

Nellie Coutant is represented by one print, a good genre in her usual vein, but rather too low in tone. Herbert R. Cummings has sent "Winter," a gum, picturesque in massing, but with snow indifferently rendered. Dwight A. Davis's two both show excellent composition. "A Study in Three Tones" shows a graceful and well placed figure against the light. H. J. de Jersey's "The Coming Storm" is a pleasant little blue marine, but the sky shows so little remnant of the clouds evidently in the negative that the title is a misnomer. In "North Winds," by W. H. Edwards, the lack of definition in the outlines of trees against the sky may serve to suggest wind-tossed branches. The print exhibits very decorative massing. Gustave Eisen has an Italian peasant scene of good quality, but marred by the attention paid the camera by the subject, and "Evening in California," a pleasant landscape, of correct composition.

G. C. Elmberger has five. "Entranced" is a fine figure composition. "The Gravel Gatherers" is a well placed group with good action. No. 73 is commonplace and "The Net Mender" is most distracting, a maze of inharmonious and conflicting lines. Photographers should learn that not every occupation will furnish a good genre. Pierluigi Erizzo sends three luminous landscapes well and decoratively composed, all showing good handling of planes and atmosphere. We have chosen one for reproduction. W. H. Evans: "Snow-bound" is a frozen river of nice quality; "A Laborer" shows good placing, quality and pose. Nino Ferrari's "Victor Emanuel Bridge in Turin" is a gum of good composition and atmosphere. No. 80 shows a picturesque ruined gateway, but is hardly more than a snapshot.

J. H. Field sends a delightful rendering of mist over gray snow, entitled, "Winter Sunshine and Mist," and two delicate groups of children with goldfish, one of which we reproduce. "A Maid of the Frontier," by Louis Fleckenstein (reproduced), is one of three prints selected for purchase. "Old Songs" is very poetic and a fine composition. "The Pet Angora" is not convincing and the spots are not well placed. James Gale: No. 88 is a canal scene, with real water, but the range of the shadows is far too limited. "The Evening of Life" is a good genre in a low key.

Eduardo Garrone: we reproduce "La Castellane," a pleasing figure piece, decoratively arranged. "Mio Tesoro" is a delightful interior with fine effect of sunlight and well placed figures. "Mio Figlio" is an excellent portrait of a child writing, taken from above. All told, this group is as strong as any single contributor's work. S. L. Gates shows six excellent portraits. Individual characterization is unnecessary. They all show good composition and strong grasp of character. Knowing the subject, "F. Dundas Todd" made the strongest appeal to us, but Nos. 94, 95 and 96 are equally good. Helen P. Gatch has three, of which "The Marsh," a good, simple figure study, is the best.

Guiseppa Castruccio is credited with seven, of which we discovered but five, all scenes in Venice and Chioggia save "L' Isola Triste," a poetic and atmospheric rendering of an island of which ten thousand photographers have



ARTHUR W. DOW

KENNETH ALEXANDER

Third American Salon





ST. URSULA

MRS. G. A. BARTON

Third American Salon

W. H. O. U.



EVENING LIGHT

F. M. TUCKERMAN

Third American Salon

1910

7704



LA CASTELLANE

Third American Salon

EDUARDO CARRONE

made snap-shots. No. 103 is an excellent artigue print of a picturesque Venetian bridge. The others are all picturesque and well arranged. Adelaide Hanscom sends two beautiful little prints. "Hope" is a soft red gum with fine lines and beautiful profiles. "Mother and Child" is a delightful little composition, fresh and simple. "When the Sea is Calm," by H. Hendrickson, was repro-



FEEDING THE GOLDFISH

J. H. FIELD

Third American Salon

duced and criticised by us in October. "November" is a pleasing harvest field scene. T. T. Henning: "Evening," a blue stained print, rather poetic. W. A. I. Hensler is credited by the catalogue with "The Thaw," but we were not able to locate it. John Hepburn sends from Scotland an old-fashioned genre, a cottage interior, good in composition and value.

Sara Holm hangs seven excellent pieces, one of which, here reproduced,

was selected for purchase by the artist jury. "At the Docks" is a poetic waterfront scene. The rest are all portraits, well done without exception. No. 121 is a very decorative portrait head in sketchy style, good in its massing. Of Frank E. Huson's three, "Thames Side at Chelsea" is the best, showing nice atmosphere and composition. No. 122 is wrong in value and confused in line, and No. 123 is commonplace. A. S. Ingram: "Oxen." Where is the driver? The animals are very well done, but the background is seriously marred by unpleasant streakings. Edward J. Jarvis: Another print in the catalogue, but not



DECORATIVE PORTRAIT

SARA HOLM

Third American Salon

located. Brenda Johnson: "Springtime," here reproduced. An imaginative composition with well placed figure.

From distant Bombay P. S. Joshi sends "Street Musicians," a characteristic oriental street scene of much interest. O. B. Judson is represented by "Spring Pastures," a pleasing arrangement of sheep, and "A Lonely Shore," a powerful panorama with a house and cabin ruins, well placed to strengthen the impression of a desolate strand. Fred Judge: "October" (reproduced) is a successful panoramic view with fine contrasts of light and shadow. "Salvage" has material for two pictures. The strong impression is made by the remarkable shaft of sunlight silhouetting the wreck, while the group in the foreground would have been better as a less definite mass employed for balance. Mrs. C. M. Kassler:

"The Storm" is an excellent little bit showing fine feeling and good composition. The values in the sky are excellent, those in the foreground a little uncertain. Mrs. Caleb Keene has one of the strong things of the exhibition in "The Prospector's Early Morn," a group of figures about a camp fire. It is an excellent rendition of a difficult subject, the very poetry of the waste. We regret that



A MAID OF THE FRONTIER

LOUIS FLECKENSTEIN

Third American Salon

any reproduction would do it no justice. "Motherland" is good, but less characteristic.

"The Still Night, by Lee H. Keller, is a pleasing night scene, rather too opaque in values. "Playing Cat," by James W. Kent, is a fine composition, well grouped and rendered. "June Landscape" has no lightness. It shows too many muddy masses, too gloomy for June. S. G. Kimber sends "A Sunlit Clerestory," a fine effect of lighting and a good decorative composition. Wm.

T. Knox's excellent landscape is unfortunately not of a color suitable for reproduction. It is one of the most pleasing outdoor scenes hung, a beautiful composition with truthful values. Charles Kroeber contributes "The Model," a good nude study, with a background *à la* Steichen. B. F. Langland is represented by a decorative winter landscape, a quiet autumn scene, and "A Misty Day in the Mountains," a poetic green gum handling its subject well.



BRENDA JOHNSON

Third American Salon

SPRINGTIME

J. Harold Liebreich favors the nude. His "St. Elizabeth," a fine nude study, is a bold attempt at story telling, justified by the artistic treatment of the beautiful model. Together with W. A. Stewart, he is responsible for "Peccavi," a well composed, but too literal nude study. Lewis Lloyd's "An Old Street, Warwick," is a picturesque bit, but the print is muddy rather than atmospheric. Robert Low's "After the Storm" and "Ebbtide" both show good quality and



OCTOBER

Third American Salon

FRED JUDGE



atmosphere. "The Hill Path," by W. E. McNaughton, is a well-composed landscape printed four tones too dark. "Twilight" deserves no comment.

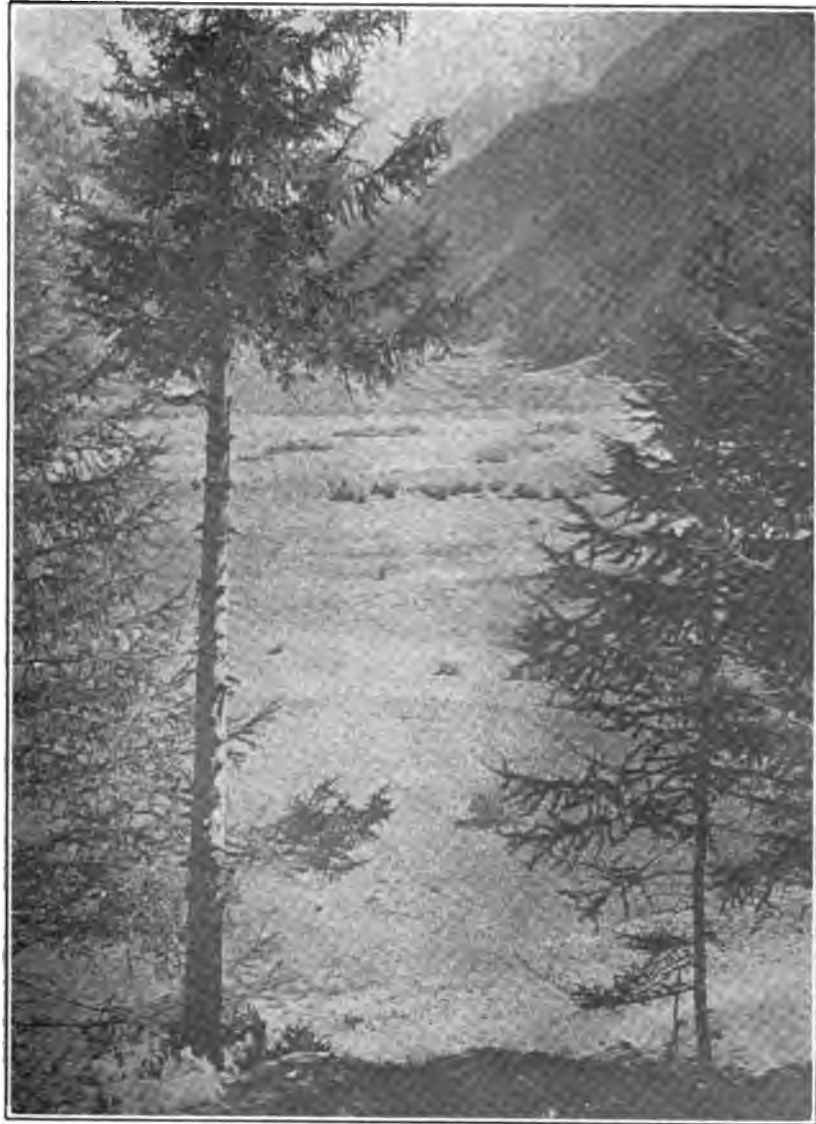
"The Willows of Grand Pré," by C. M. Mansfield, are represented as a black triangle. The picture has no other than a sentimental interest. "Gratia," by Gertrude E. Marr, has good modeling in the face. All else is buried in needless blankness. A strong portrait is Martinelli's "The Artist." The hands and accessories are well treated, and the head has an excellent swing. "Venice," by Arthur Marshall, would be a pearly, misty rendition, but is too flat. It utterly lacks an accent, which is needed. Harvey W. Minns has five accepted prints. "Helen" is a beautifully delicate portrait which we would like to present, were the half tone process equal to its demands. "Landscape by Moonlight" and "Victory of the Dawn" are a pair of excellent studies of early morning mists of exquisite softness and truth. Both are true moonlights, taken at the first sign of dawn. "A Landscape" is almost equally soft and fine, but is, unfortunately, marred by a broken tree at the left, which disturbs the harmony of outlines. Calista Moore's "The Water Carrier" is an excellent composition with good tones.

J. C. S. Mummery mars his two telling prints with staring signatures neatly lettered on. Both show excellent atmosphere, pleasing composition, and masterly placing of effective highlights. "Life Long Friends," by George R. Muntz, is a good rendition of a hackneyed genre subject. F. L. Padgett sends a large print of an able-bodied shepherd industriously herding a sheep, a lamb, and a large dark windmill. The placing of the spots is mathematically correct, but the windmill is too insistent, marring an otherwise fine picture.

The Misses Parrish confine their efforts to a single print with a curiously punning title. It is a truly charming child study. J. R. Peterson shows more power than his previous work would indicate. "The Wave" is a magnificent thing, of great realism, yet absolutely free from the minute structural detail which renders petty most marine pictures. "Wave Action" is only less well done. "The Meadow Road," a brilliant landscape, is equally good in its field. Wm. H. Phillips, another rapidly advancing worker, is in the highest class, the seven-print men. His strongest print, and the best he has ever done, "The Road from Tivoli," is here reproduced. It is as typical of the olive-bordered waysides of Italy as the work of Alexander Keighley. Of "Reflections," and "In Harbor" one might well be spared, though both are excellent, because *motif* and arrangement are identical. "In Turkish Waters" shows picturesque material and strong massing. "The Village" is an unusual composition and a pleasing treatment of commonplace material.

Emily Pitchford is another worker of great promise. Each of her four prints is excellent. "A Study in Curves" (reproduced), is as decorative as any picture hung. The lines are arranged in irreproachable harmony. "Summer" is a beautiful decorative panel of unconscious children. Her two portraits are very strong, but No. 179 is marred by too much black ground. C. F. Potter, Jr. hangs a picturesque Cuban scene with a brazen tropic sky, again emphasizing the difficulty of making pictures from irreproachable material in low latitudes. George T. Pover contributes a satisfactory "Portrait."

Ethel Rector is another new worker, who is in the "seven" class. It is difficult to choose among her delightful portraits. "Girl with Muff" shows a charming little model, well portrayed. "Within and Without" is a delightful little portrait, soft and delicate. "Mr. S. E. B." is portrayed in a quiet, unassuming and straightforward manner. Even among the many good portraits in the Salon, these will all be noticeable.

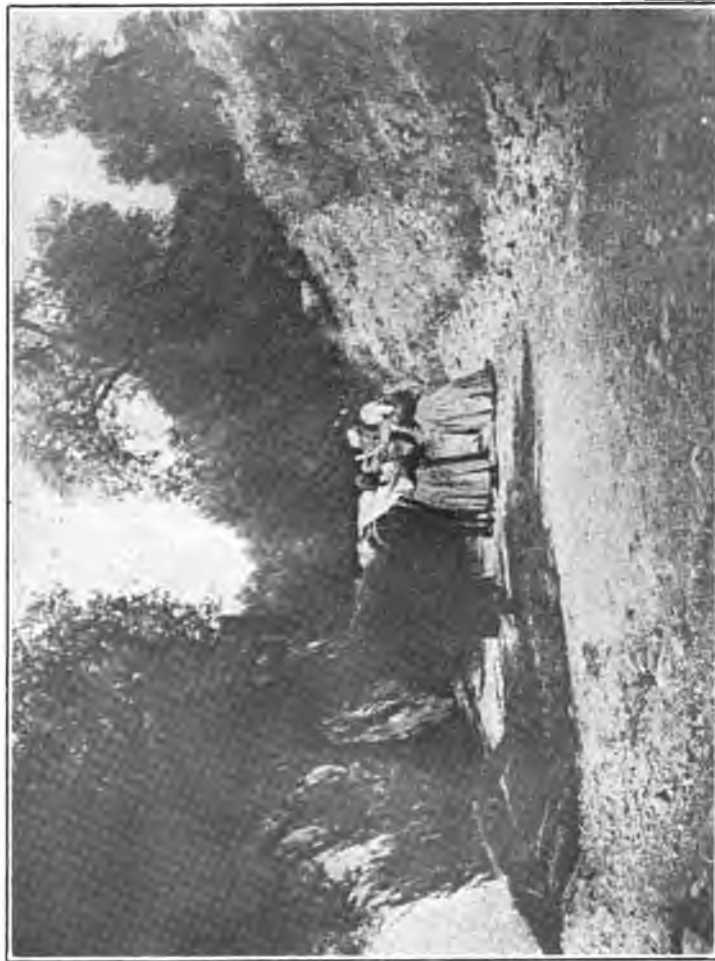


LANDSCAPE

PIERLUIGI ERIZZO

Third American Salon

B. S. Rogers sends a "Study of Miss Lott," a finely modeled head, marred by an unfortunate black spot in the lower right hand corner. But for this evidently planned, but most deplorable accent, it would be one of the gems of the exhibition. John W. Rumsey, of New York, is evidently a traveller and an artist, for he sends four large prints of scenes in as many countries,



Wm. H. PHILLIPS

Third American Salon

THE ROAD FROM TIVOLI

which will hold the attention rivetted. "Hyde Park, London," is a rarely beautiful landscape of wonderful quality. No half-tone could do justice to it, so we reluctantly laid it aside when choosing for the engraver. "The Quay, Amsterdam" is a subject which might be the most banal of snap-shots in any other hands, but is here a masterpiece with all the beauty and feeling of a fine mezzotint. "The Park Monceau" and a canal scene in Bruges are but little inferior to these.

Lee Russell's contribution is "Winter" a picture of convincing snow and dark woods. Edward F. Ryman is represented by four genre scenes the best being "At the Pump," a nice grouping in soft tones, and "An Old Salt." Geo. H. Scheer vainly seeks by staining his sunset picture red to add to its verisimilitude. It would be far better without color. "Beeches in Winter" is a queer collection of horizontal branches over poorly rendered snow. "The Road in the



STUDY IN CURVES

Third American Salon

EMILY PITCHFORD

Sand" has good quality and clouds. "Evening" by Thomas C. Sheehan, is a good impression, with a pleasing arrangement of spots.

S. S. Skolfield sends four prints of merit. "Willows" is a strong composition showing beautiful detail. The values are all in keeping. "Winter" is a true picture of that season, but the figures are a bit too central. "The House Boat" is a nice composition, and a picture of sand dunes has good windy clouds. R. L.

Sleeth, Jr., sends six, three of which are characteristic and well-done Parisian scenes. His best is "Early Morning," a picturesque rendition of an iron bridge, showing good arrangement of spots and fine atmosphere. "Landing Stage" shows good verticals and reflections. Louis J. Steele sends "Shrimpers," a figure composition, with a nice feeling of wetness in a sunlighted beach. "In Old Touraine" is a picturesque street scene. "The First of the Season," by Helen E. Strobhart, represents a snow storm with fine atmospheric effect in the distance, but the diagonal lines in the foreground do not help the feeling.

H. Youel Sümmons contributes "Die Schnitterin," a simple and charming study of a harvester, and a misty landscape, soft, charming and well balanced. "The Old Farm in Winter" by Gustav F. Swenson (reproduced) is a fine snow scene. "Winter Twilight" is simple, but the sky is muddy. John W. Schuler's "Autumn Twilight" is a quiet little landscape composed of well spaced vertical lines. Sweet Brothers contribute five. The best is "A November Morning," a nice, misty scenes, with well placed figures. "Before the Gale" is unusual in composition, but handicapped by atrocious mounting.

J. H. Tarbell, with six, scores a success, "The Capitol by Night" being one of the three purchased pictures. There seems to be too much light in the picture to quite bear out the title. "One of the Finest" is a very striking and original portrait of a cat. "Through the Valley" is an excellent picture of a sheet of bolting cloth superposed on a very pleasant landscape. Several of his pictures suffer from immoderate use of bolting cloth, which should be used to impart softness and not a harsh and insistent texture. "Hollow Horn Bear" is a magnificent Indian portrait, but seems to be trimmed a bit too close. "Now I Lay Me" is a charming child's head.

B. Ward Thompson sent three landscapes which were passed by the judges, but an unfortunate choice of mount, resulting in chemical action on the prints, required their withdrawal before the exhibition opened. Charles E. Townsend sends two, of which "In Marin County" is a beautiful decorative arrangement, but deficient in atmosphere. "La Pluie à Bordeaux," by J. M. Teindas is a brilliant artigue with velvety blacks, displaying a good feeling of motion. "Etude de Paysage" is a pleasing little landscape in gum. Charles Tracy contributes three. "Homeward at Night" is false in values, but "A Frosty Morning" is a nice little lanscape with good composition and atmosphere. F. M. Tuckerman shows "Evening Light" (reproduced) and "The Promenade," a well done park scene with figures well placed. Russell W. Taft's "Into the Night" is a soft train study, also rather reminiscent of Stieglitz. James E. Underhill is represented by two scenes from Bermuda. "An Old Bermudan Home" is an unpicturesque subject well handled, and "Coral Sand Dunes" is very good in quality, with nice opposition of masses.

"In the Moonshiners' Country," by Frederick Vrieland has well rendered distance, but a single bold curve of rock makes the picture. M. D. Wadhams sends "Mists of the Morning," a well spaced misty landscape. Arthur W. Walburn shows "Through a Courtway," a fine piece of quality, without other interest. H. F. Walbridge's chicken picture is a good bit of genre, but "Little Sunbeam" is spotty, and the unfortunate mirror takes the attention from the child.

R. E. Weeks contributes four landscapes. "A Winter Stream" is a poetic rendering of a snow-bound brook, and "The Birches depicts snow shadows well. "March Mist" is flat and "Seeleyesque." Mrs. Eleanor W. Willard is addicted to spots, preferably in horizontal rows, an arrangement which it is exceptionally difficult to make artistic. Two of her prints show queer horizontal lines of heads arranged along the sky line. It would seem as if her Dutch women would have

consented to pose in some less formal arrangement. The quality of all the prints is very nice, but all are too spotty to leave a favorable impression. W. McG. White's "Spring" is an unsuccessful arrangement of four spots and a fan-shaped willow. Its only merit is a soft atmosphere.

A profile head by Fanny Williams is a well posed study in three tones. Dr. Walter Winchester sends "The Last Glow," a sunset pleasing in all but its lurid color, and "The Last Mooring," a good arrangement. J. Dunbar Wright chooses his three subjects from far quarters of the earth. His desert scene from Morocco is an excellent and picturesque record of travel. "Brittany Fishermen" is a fine group, and "Canadian Trapper" is a strong character profile.

Dr. W. F. Zierath contributes four. "The First Thaw" is an excellent rendition, the very picture of discomfort. "The Fire" is an excellent genre, with good smoke and atmosphere. The other two are pictures of mist and smoke, excellently arranged and rendered. The maker seems to excel in atmospheric rendition, and we would advise him to further cultivate this difficult field. William H. Zerbe, with five prints of varied subjects, closes the catalogue, but is by no means least, if last. "The Dawn of Day," cows in a ford, with a wonderfully beautiful hillside towering beyond, would be one of the gems of the exhibition, but for the unfortunate patches of white sky in the upper left hand corner. These throw the whole picture out of key. No painter would have committed such a mistake. "A Summer Day" is apparently the same scene from a different viewpoint, and is merely a good composition. "The Sisters" is a good low-toned gum, well arranged. "Early Morning Mist" shows good composition and atmospheric rendering. "The Window Seat" is a good decorative arrangement against the light, but suffers from the absolute blankness of the window, which has apparently nothing outside.

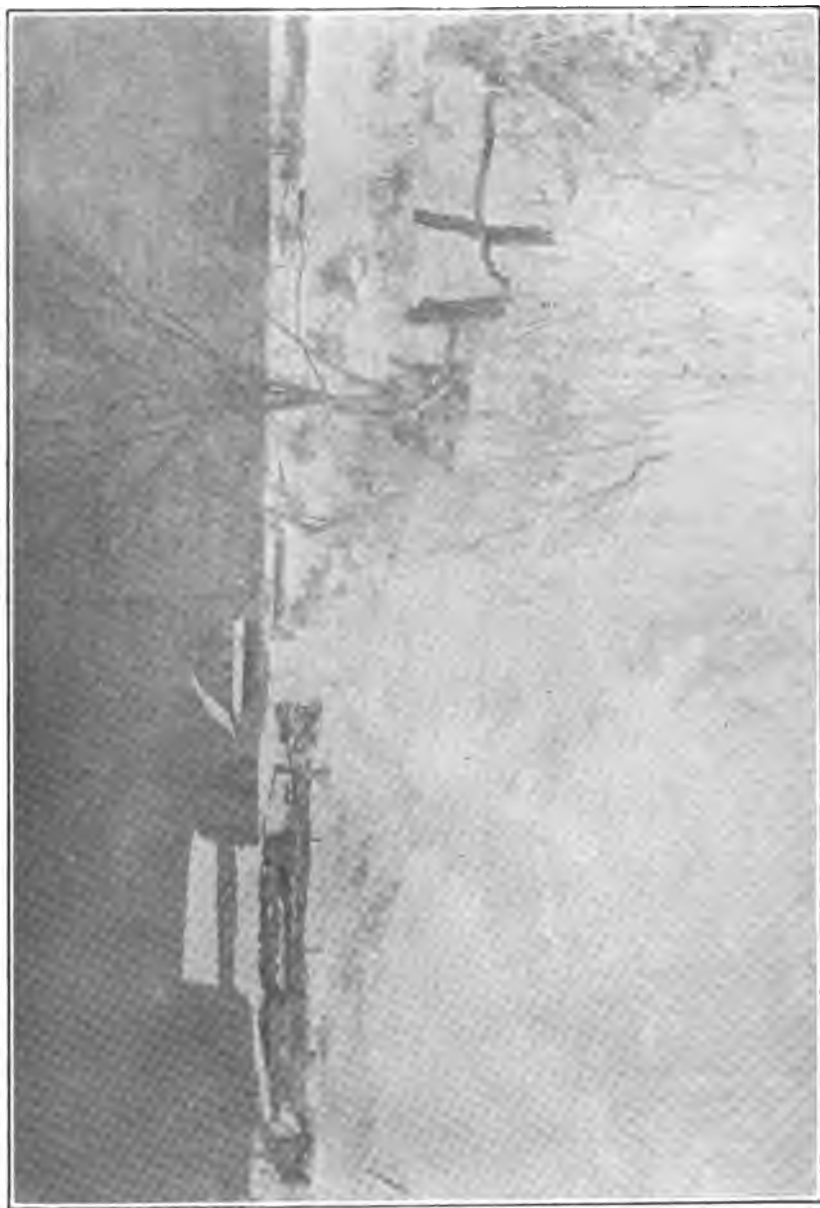
---

## WORDS FROM THE WATCH-TOWER.

BY WATCHMAN.

I have come across some queer patents in my time, but surely a photographic projectile takes the cake, and could only have been conceived by a German in a German beer garden. That it is something more than a joke, however, is vouched for by both *Apollo* and *Die Photographische Industrie*, and is given by *The Amateur Photographer* as follows:

"Herr Maul's proposals for photographing a wide expanse of country by means of a camera constructed in the form of a projectile, this in ordinary cases taking the form of the usual conical shell. The shell is ordinarily thrown up by means of a kind of trap, and at a predetermined angle, the shutter automatically opening just after the projectile has passed the apex of its parabola, when the camera is directed somewhat downwards towards the region to be photographed. The scheme as formulated does not appear by any means impracticable from the point of view of military operations, as if the trap is carefully set, and the air is still, the position at which the projectile must fall can be determined to a nicety, and precautions can be taken to prevent damage



THE OLD FARM IN WINTER

Third American Salon

GUSTAVE F. SWENSON

by concussion. A height of 500 to 700 metres appears to have been attained, and also a very exact timing of the shutter release, this being best effected by a time fuse. Herr Maul's German patent is numbered 175,259, and the date is March 30th, 1905."

\* \* \*

Once more the Thaumatrope has been introduced as something new, this time by the *Wiener Mitteilungen* which says:

"A subject is elected, in which there are two characteristic positions, as for example, a person pumping. A photograph is taken of each of the characteristic positions, and the photographs are mounted on a card, one on each side, after which the card is spun round by a thread, so that the alternate images appear to the eye in rapid succession."

As a matter of fact the the thaumatrope was invented by Plateau about 1828, and I have a distinct recollection of some seven years thereafter thinking I was no small beer when I made, including the drawing and painting, several of them for my playfellows. My favorite image, as I think I have said in this magazine before, was a parrot in a cage, the bird on one side, the cage on the other. And I pretended to do a little conjuring by showing them the empty cage, and then beginning to spin the card, commanded the parrot to appear.

\* \* \*

"A BRANDY AND SODA FROM THE SUN." There seems to be less humor in connection with photography than with almost anything else, and so I am glad to clip the following from *The Amateur Photographer*; although I hardly see why it should always be *an American*.

"In an interesting article entitled "The Romance of Photography," by Sir William de W. Abney, K.C.B., F.R.S., an anecdote is given which is worth repeating. Sir William was using the sunbeams for his spectrum photography at the Riffel House, Zermatt, whither he had gone so that there might be less atmosphere between himself and the sun than he got in England at the sea level, when he came across one of our cousins from the other side of the Atlantic. This gentleman took great interest in the instrumental arrangements, and after silently watching for an hour suddenly broke in with: "I guess, sir, you've got a photograph behind that." This was agreed to. "Well, sir, what are you doing with the sun?" Before giving the answer it flashed across Sir William's mind that some of the small, fine black lines in the coloured band of the visible sunbeams spectrum indicated the presence of sodium; also that alcohol and brandy might be classed as carbo-hydrates. So the reply came readily. Looking grave, he said: "Sir, we have already found soda in the sun, and now I am trying to find the brandy." There was no more conversation; but the American rushed down to Zermatt, and informed the hotel company that he had encountered a lunatic Englishman at the Riffel who was trying to get a brandy and soda from the sun."



It is somewhat curious that while complaining of the lack of humor in photography that the very next paragraph that comes to me should almost belie the statement. Surely there is humor in the answer to a correspondent by an editor of a contemporary that has just come to hand. The correspondent, a record of fact man, complained of the awards in a recent competition, pointing out as one of the faults the fact that had the picture been hung upside down nine out of ten of the passers by would not have known the mistake. To this the editor, and I suppose critic, replies: "The objection to the———, that it looks as well upside as down, is really a high compliment to the composition." Well; it is like the Irishman's formula for punch, so much sugar, so much lemon, and so much whiskey, *and every drop of water spoils it*. So would every word of explanation spoil the criticism of the critic.

\* \* \*

It is amusing to find that some magazines, even those that are generally to be relied on, will make a slip when they deal with photography. The most recent that I have come across is in *The Scientific American* of December 8th, where some one is allowed to tell of a new shutter that automatically gives a shorter exposure to the sky, and from which it is evident that the writer does not know that nearly fifty years ago a sky shade was made for just the same purpose,—that it could be set to give any desired control of the sky exposure, and that it answered the purpose admirably. But it was not of the shutter I meant to speak but of a curious mistake regarding the use or other purpose of the ray filter. The author says "It is impossible to get correct timing for all parts of the plate. When the shadows are right the more generally illuminated parts are greatly over-exposed and this is particularly so in landscapes, and *to overcome the difficulty recourse had to be had to the ray filter*. The italics are mine; and *The Scientific American* knows as well as every true photographer that the purpose of the ray filter was not to even out the exposure,—not to lessen contrast, but to correct the values of the luminosities by the partial absorption of the over actinic blue-violet; to secure a nearer approach to the orthochromatic.

\* \* \*

THE TESTING OF SHUTTERS for speed is a problem always with us, and it may be of interest to indicate the essential principal of a new device which has been recently invented by Herr Neerlich. An aluminum disc, having a radial slit cut in it, is made to revolve at a regulated speed by the usual means, as a weight, with adjustable fans as control. Immediately behind the revolving disc, and central with it, is a well-illuminated ring-like opening in an opaque screen, and around this ring are arranged 150 clearly defined teeth or projections, these projections being in groups of five, alternately on the inside and outside edges of the ring-like window. It is obvious that if the speed of the devolving disc is known, the number of teeth showing in the photograph will give the means of calculating the speed of the shutter.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

## PUBLISHERS' NOTE.

In consideration of the fact that the publication of the CAMERA AND DARK ROOM has been conducted for the past few years under the same management as that of the AMERICAN AMATEUR PHOTOGRAPHER, their field being somewhat similar, it has been decided, after considerable deliberation, to discontinue the publication of the CAMERA AND DARK ROOM as a separate publication, yet still to retain its identity as a special department in the new combined monthly under the style of THE AMERICAN AMATEUR PHOTOGRAPHER, including CAMERA AND DARK ROOM.

The subscription lists of both publications will be compared and those who have received the two will have their subscriptions extended accordingly.

The consolidation was decided upon for the betterment of each magazine and economy in manufacture and promotion. It will also bring numerous benefits to our readers since the enlarged magazine is intended to contain all the good features heretofore included in both and in addition other new and practical things of especial interest to beginners and experts.

It will be the policy of the editors to foster photography as a pictorial art in a way that may be easily understood and to give reproductions from time to time of the best examples of work in this line. In fact, all branches of photography will receive consideration, enabling the advanced student, artist, or the novice, to secure benefit therefrom.

It is desired that a mutual interest be stimulated between ourselves and our readers in the hope that they may make use of the magazine as a medium of expression of opinions and of information. The magazine is maintained in their behalf and FOR THE ADVANCEMENT OF PHOTOGRAPHY, and we hope to receive suggestions, items of interest, unusual experiences pertaining to photography, good pictures with data and hints for other workers.

Every reader is urged to send us the names of friends interested in photographic work and to assist us in procuring additional readers. In return for favors extended we can only promise our readers to give them the best magazine we can produce.

It seems to be certain that every photographer should be a subscriber to some magazine pertaining to photography. To make this one broad in its field, comprehensive and thorough in its teachings, is the hope and aim of

THE PUBLISHERS.

## Editorial Notes.

In consolidating with this issue the AMERICAN AMATEUR PHOTOGRAPHER and the CAMERA AND DARK ROOM, our principal endeavor has been to make a magazine which shall appeal to every user of a camera, no matter how ignorant or how advanced. We do not expect that every reader will be pleased with, or understand, every article. But we hope that every reader will find something which shall solve a difficulty, stimulate a question, or furnish a new inspiration. With the varied table of contents, this would seem to be a reasonable expectation, and we feel that a dissatisfied reader should search his own mind for reasons. This number represents many days' work on the part of four editors, of wide photographic experience and the most varied mental tastes. It mirrors the experience of a score of others in all parts of the world, and covers many departments of our art and science. It should give to all food for thought.

Our pictures are chosen this month from the best that the world can offer. They represent the strongest work of both of the strong organizations, which number between them nearly all the amateur workers of the country who aim to do serious work. The editors in selecting these pictures have endeavored to include every kind of artistic expression which photographers affect.

There are three departments which can be of personal use to every reader. If you have a question you want answered, send it to any of the editors and we will try to answer it. If you have a picture you want criticised, send it to any of the editors named under the various department headings, and he will analyze it. If you want to comment on or criticise any feature of the magazine, suggest a subject for an article, give your own experience, or say something about any phase of photography, send us a letter and we will take due notice of it in the appropriate department.

In conclusion, let us wish you an interested and happy year of photography under our guidance.

\* \* \*

In connection with the article by the well-known art critic, Charles H. Caffin, we reproduce a number of pictures by prominent members of the Photo-Secession. These are chosen from recent work of this organization not hung at the annual exhibition, and hence not referred to by Mr. Caffin. The point on which he lays stress, *quality*, would suffer so much in making half-tone reproductions, that it would not be fair to reproduce any of the pictures he mentions. Our pictures are chosen to cover as wide a range of subject and treatment as possible, and should serve to prove that the members of the Photo-Secession can do more than one class of work. The pictures are by both old and new members of the Photo-Secession and afford a good chance for comparison as to styles of work.

The Third American Salon is an accomplished fact, and bids fair to be as well received by the critics as its predecessors. For this result the principal credit is due to the tireless efforts of R. L. Sleeth, Jr., who almost alone has performed the enormous amount of detail work inseparable from such an exhibition. Deprived at the outset of the support of his local camera club, which withdrew from the Federation, he founded a new club of artistic workers, and under its auspices successfully solicited pictorial support, not only in America, but in England and Italy. No one cognizant of the facts will dispute that the entire success of the exhibition is due to his efforts.

As to the merits of the Salon, we have spoken elsewhere. It is certainly an institution worthy of the support of every American photographer. It affords the only open exhibition where any camera enthusiast may send his pictures to measure them against others from every part of the country. Any photographer who has a picture hung here may feel that his work is strong enough to encourage him to further efforts with excellent promise of future success.

\* \* \*

#### FROM DIFFERENT POINTS OF VIEW.

The author of the following letter has long been a diligent reader of this magazine, has frequently claimed the assistance of "Our Portfolio," and has persistently shown a desire for improvement in his work; all of which, in the light of his letter goes far to strengthen the oft repeated saying that "Artists are born, not made." The picture referred to is the frontispiece of our November number, Steichen's well known "Lady and Child," and when it is remembered that judges of international repute have awarded it prizes when in competition with thousands; that it has been accepted in Salons, where only works of artistic merit could pass the selective ordeal, and that it has met with nothing but praise from critics of recognized ability, there would seem to be some valid reason for the different opinion of the writer of the letter and those who think with him. The letter is as follows:

Dear Sirs:—As you do not criticise all the photos that you print in the AMATEUR, I think that you ought to know how they appear to some of us whom you have been trying for years to teach.

I have gazed long and earnestly at Steichen's "Lady and Child" and it appears to me as considerable skirt, fairly well represented in the folds but covered with snow which seems out of place in summer.

A silhouette of a lady's head from the back, a dim shadow of a child's face, apparently idiotic, a *halo* around said head that could not have got there by photography and which there is no reason for putting there anyhow, a deformed hand waving in the air and both lady and child seated on what may be a level field or may be a side hill, and the whole "set out" covered with white spots that, to use Dr. Nicol's expression, might have been thrown on from a pepper box.

Yours respectfully,

W. H. B.

[We have often said that a picture should suggest more than is seen, and that what we see in a picture depends largely on what we bring to it. Imagination is as necessary to the appreciation as to the making of a picture; and W. H. B. has some of that to bring, but it is not of the right kind else it would not suggest snow where sunlight was intended nor see scattered lights in grass run to flower. But our friend himself gives what may be the key to his system of criticism. "A halo around the head that could not have got there by photography and which there was no reason for putting there anyhow." The true picture lover does not ask how a picture was made but what is its effect; and to him the halo will suggest a line of thought, leading to all that the boy stands for and to thoughts of the responsibility laid on those to whom children are given.

From the quoted sentence it is evident that our friend prefers photography pure and simple; photographs that are records; and we are far from undervaluing them; but when judges are looking for artistic merit they will prefer something that shows more than mere camera record every time. In picture making the camera must be helped to discriminate between matter of greater and less importance; be influenced by the individuality of the artist; and what it cannot be made to do must be done without it.

But the arms of photography are wide with room enough for all, so that each may adopt the phase which pleases him best and press on towards the top, assured that there is honor enough in every phase.—Eds.]

## Our Prize Competitions.

### THE A. A. P. MONTHLY COMPETITION.

The first prize in our monthly competition has been awarded to Will D. Brodhun for "87 Years." This print is an enlargement from a 4x5 Kodoid film. It was taken by the light of a single window curtained to within 2½ feet of the top. The sitter was placed 6 feet from the wall, which was covered with terra-cotta paper. The exposure was 7 seconds. The flesh tones are very well rendered, and the composition is good.

The second prize goes to W. J. Scales for "Arithmetic." Prints deserving of honorable mention were sent in by John F. Jones, Henry Pallas, J. H. Field, U. Le Roi Upson and H. G. Dorsey.

The subject proposed for the January competition is "Snow Scenes." Any photographer, whether or not a subscriber to the AMERICAN AMATEUR PHOTOGRAPHER, may compete. Prints should be sent by mail or express, fully prepaid, to Frank R. Fraprie, 6 Beacon St., Boston, Mass., before February 1.

The subject proposed for February is "A Photographic Calendar." It is to consist of four leaves, each to serve for three months and to have mounted on a print suitable to the season. The calendar pad may be pasted or drawn on

the mount. The points to be judged will be artistic merit and suitability of the prints, taste in mounting and neatness of work. The object is to show the use of photographs for decorative and money-making purposes. Such calendars, well made, should find a ready sale in your home town. Closes March 1st.

The subject proposed for March is "Photographic Postcards." The prize will be given to the most artistic and carefully made set of three postcards printed in velox, platinum, or collodion. Blue print, Eastman sepia and gelatine cards will not be accepted, because they are either not adapted to reproduction, or are likely to fade if not very carefully made. The three processes specified afford sufficient range of color and method. Neatness is essential. Masks must be carefully adjusted, all lines parallel and all whites clean, titles carefully lettered and all details looked out for. Closes April 1.

First and second prizes will be awarded, a bronze medal in each case, with blue ribbon and silver bar, and red ribbon with bronze bar, respectively. The first award includes also a cash prize of five dollars. Honorable mentions may be given to meritorious pictures which do not attain prize rank. Awards may be withheld or divided at the discretion of the judges. Prize-winning pictures may be reproduced, and unsuccessful pictures will be returned if requested.

---

#### LENSELESS PHOTOGRAPHY COMPETITION.

Three cash prizes of \$5, \$3 and \$2 are offered for the best set of prints from negatives made through a needle hole with a short article on "Pinhole Photography," describing the methods of the worker. Pictures must have name and address of the maker on the back, also full details as to plate or film, size of aperture, condition of light and length of exposure. Closes February 28.

---

#### LANTERN SLIDE COMPETITION.

The friendly competition for the purpose of getting together a set of high class slides for circulation is still open. We have received several entries and more promises. No prizes are offered, but the AMERICAN AMATEUR PHOTOGRAPHER medal will be awarded to the maker of the best set. Not less than six slides must be sent by each person and as many more as may be convenient. When the slides have been judged they will be marked according to their points of merit, and will be circulated first among the contestants and afterwards open to any reader of this magazine for home or public use.

Rejected slides will be criticised and returned to the makers. Send slides, prepaid, to J. P. Chalmers, 361 Broadway, New York City.

---

#### BROMIDE ENLARGEMENT COMPETITION.

A Bromide Enlargement Competition, held last year in CAMERA AND DARK ROOM, stirred up considerable interest, and a number of readers have written to us requesting that a similar competition be again held. This we have

decided to do, and the prizes to be offered will be announced in our February number, the closing date for entries being March 15th, so as to allow distant readers to compete.

There will be an amateur and professional class, and the conditions are that (1) the prints and negative must be the individual work of the contestant; (2) a straight contact print (without any dodging) from the negative must accompany the enlargement; (3) dodging or double printing in the enlargement will be allowed, and they may be any size not over 16x20; (4) enlargements will be judged on the basis of 50 per cent. for technique, 30 per cent. for pictorial quality and 20 per cent. for choice of subject.

## Notes and Comments.

**LIBERAL POST-CARD LAWS.** Is there any reason why our P. O. laws should be less liberal than those of other countries? None that is known to us, and yet so they are to an extent that should make us kick till they are repealed. For years the Britishers have been permitted to write on one-half of the address side of the card, leaving the whole of the other side for the picture; and now by a recent order of the Postmaster General, permission is given to paste a picture on the card instead of printing it thereon. But this is a free country, and probably if our Postmaster General were to get authority for the issuing of such an order our makers of sensitive cards would be down on him like a thousand of bricks in the exercise of their freedom to prevent him. It would, however, be a great advantage to many to be able to paste on a picture rather than to have to print it on the card. (As a matter of fact, the U. S. P. O. department has recently issued orders allowing both these things. They may be inspected at any post office.—F. R. F.)

**PLATINUM STILL GOING UP.** \$26.50 is now offered per ounce, 500 ounces being urgently required immediately. Chemical manufacturers requiring large platinum stills, and chemists needing platinum dishes, platinum wire and platinum articles will hardly get them for less than from \$45 to \$50 per ounce: The price of platinum paper may well become prohibitive and the temptation to pass "platino" and other evasions be greater than ever. Of course, there is carbon, and at one time that might be relied on to be permanent, but since colors became the fashion even its permanence is always more or less doubtful. And this happens at a bad time, too, just as picture lovers were beginning to realize that photographs were worth buying. People willing to pay from ten to fifty dollars for a photograph will hardly care to do so without knowing whether it may not fade in a few months or practically disappear in a few years. Of course, those who command such prices can easily afford to use platinum paper, but it would

be well that they should secure from the maker a guarantee that it is so, and they should write on each print a similar guarantee.

**HONORING PHOTOGRAPHY.** Photographers everywhere will be glad to know that France has honored itself in recognising the work of the House of Lumière in the person of its head and founder, M. Antoine Lumière, by promoting him from Chevalier to Officer of the Legion of Honor. Perhaps no one man has done more if as much for the advancement of photography, and therefore it is matter for congratulation when the powers that be are able to recognise and acknowledge it.

**THE SOCIETY OF COLOR PHOTOGRAPHERS.** We noticed in a previous number the formation of such a society, and although there are not in this country anything like the number of color workers that there are across the water, some of our readers will be interested in the following rules that have been made for the regulation of the new organization in London and may find them useful if such a society should by and by be founded here.

#### RULES.

- (1) *Title.*—The society shall be called The Society of Color Photographers.
- (2) *Objects.*—The objects of the society shall be to further the progress of color photography.
- (3) *Membership.*—All interested in color photography are eligible for membership.
- (4) *Nomination.*—Ladies and gentlemen are admitted to membership on the nomination of a member, or upon their own application. The committee shall decide any question as to eligibility.
- (5) *Subscription.*—The subscription shall be 5s. per annum, payable on admission. Subsequent subscriptions shall be payable in advance on January 1 in each year. The subscription of members joining after October 1 shall be considered as paid up for the following year. No member shall be entitled to any of the privileges of membership if their subscriptions shall be three months in arrear.
- (6) *Meetings.*—Ordinary meetings shall be held from time to time, fourteen days' notice of which shall be given by the secretary. The committee may call extraordinary meetings as they may think advisable. At the annual general meeting, which shall be held in October in each year, a balance-sheet shall be presented, and officers elected, and any other business that may require the decision of a general meeting. Special general meetings shall be called within fourteen days of the receipt by the hon. secretary of a requisition signed by five members, stating the purpose of the meeting; and no subject shall be discussed thereat but that for which the meeting was called.
- (7) *Alterations of Rules.*—Alterations of the rules shall only be made at the annual general meeting or a special general meeting. The alteration proposed shall be stated in the notice convening the meeting.
- (8) *Officers.*—The officers of the society shall be a committee of four members, a treasurer, and secretary. The officers shall retire annually, but shall be eligible for re-election.
- (9) *Books of Account.*—Proper books of account shall be kept by the treasurer, and a book of minutes shall be kept by the hon. secretary.
- (10) *Rules.*—The payment of a subscription by a member shall be taken as indicating acquiescence in these rules.

The Activities of the Society are:

- (a) The mutual interchange of ideas and experiences in color photography by means of a circulating portfolio of specimens and MSS., which shall include questions and replies.



This portfolio shall be circulated every three months, and shall not be retained by any member longer than five days.

(b) To obtain for members assistance by correspondence from more experienced workers, through the medium of the hon. secretary.

(c) To hold an annual exhibition in London, open to members and non-members, at the time of the general meeting.

(d) To form a permanent collection of specimens, apparatus, etc.

A most cordial invitation to join the society is extended to all who are interested in the advancement of color photography; membership is not confined to practical workers. Nomination forms may be obtained from the hon. secretary, Mr. Henry J. Comley, Surrey House, Stroud, Glos.

Any one who favors the formation of an American Society of Color Photographers on the above lines may communicate with Mr. F. C. Beach, 361 Broadway, New York. As soon as a sufficient number have signified their desire to become members, steps will be taken to form the society.

**HYPERFOCAL DISTANCE.** Hand camera workers are often at a loss to know just what to consider the hyperfocus of their lenses, the distance at which and beyond which all is in sufficiently good focus. Dr. Lindsay Johnson has come to their aid in a paper in *The Photographic Journal*, the organ of the Royal Photographic Society, and as  $f/8$  is the aperture most generally used in hand camera work his rule is as simple as it is efficient. Taking it for granted that a confusion disc of 1-100th of an inch is satisfactory, it is only necessary to multiply the focus of the lens by itself, to square it, in fact, and the result will be the number of feet at and beyond which everything is in sufficiently good focus. The square of a six-inch lens is 36, and consequently its hyperfocal distance when working at  $f/8$  is thirty-six feet.

---

## Letters to the Editors.

### AVOIDING GRANULARITY IN COPYING.

GRAND RAPIDS, MICHIGAN, Dec. 12, 1906.

EDITORS AMERICAN AMATEUR PHOTOGRAPHER.

Gentlemen:—

In regard to the article in your current number on "Granularity in Copying," I would like to give my experience.

I had a group shown me, printed on a "granular" surface paper with the request to copy and enlarge one "head and shoulders" from the group. The subject was dead. There were only two prints in existence, no other photograph of the subject was known to have been taken and the negative was broken across her face.

Two Chicago photographers had tried and produced results resembling the final stages of small pox.

I tried by some such methods as are outlined in the article above referred to—and failed. Finally, I copied at the same size and secured a negative of good contrast and as little granularity as could be expected. Then by using this small negative in an enlarging lantern, I obtained any size I wished—cabinets, panels, &c.—with almost no evidence of the grain (as the ordinary lens used in such a lantern tends toward softness).

One other experience in recent copying—although in a slightly different line. I wished to copy and enlarge a daguerrotype of an out door scene, taken 54 years ago. The little picture was faded almost out, badly stained and had been without a cover glass for a good many years; so finger marks were apparent. It was with great difficulty that one could make out anything of the picture.

I copied it first with slight enlargement, but still within a 4x5 limit, on a slow plate. I used strong developer for all contrast possible. After final washing I intensified in mercury. I next made a contact transparency on a lantern slide plate and developed that for all contrast possible, then intensified that.

Next I enlarged this (positive transparency) to 8x10 and did so from the back side of the positive (as the original daguerrotype was reversed) and after developing this for contrast—and intensifying again—I made a print on Carbon Velox (for contrast) and secured very satisfactory results.

The picture was important, in that it becomes the oldest photograph in a historic series of our city.

Respectfully,

GEO. E. FITCH.

---

## DEPTH OF FIELD.

EDITORS AMERICAN AMATEUR PHOTOGRAPHER:

Your November number comes so replete with good and comforting things, that I really cannot keep silent any longer.

Your comprehensive classification of the critic of the "fuzzy" picture as being a person whose lack of understanding is the source of his dislike, is well calculated to make all of us "sit up and take notice." Your diagnosis reminds me of "heart failure" as a cause of death. I have nothing but an admiration for the artistic sense that can find beauty in the dim outlines of such a picture as your November frontispiece.

The one of your October number certainly does appeal to even me, for it represents what I have seen in the way of atmospheric effect. But this is not what I started to write. It will, however, enable you to classify me and place proper value on what follows:

I wish to express appreciation of the article by John Boyd on "Instantaneous Exposures," it being one of the few that is addressed to the understanding of those in my class.

Perhaps you "upper class" men have never found it necessary to formulate an idea in "Kindergarten" terms before you could comprehend it, but I believe that the majority of my class have less knowledge about more things than you are apt to realize. When we read your articles, our minds attempt to form pic-

torial illustrations of your meaning, with results that would be amusing, were they not lamentable. At times we are tempted to come to the front with the results of our conjectures, but almost invariably refrain, because we may not be correct, or if correct, it is really too simple to talk about, and there are always so many others who are better qualified. And so, Mr. Editor, I wish you could stir up my class men, and women, and encourage them to speak right out in meeting, to the end that we may "swap" juvenile ideas—all under your gracious correction.

That this preachment may not be without practice, I here offer some of my "one-syllable" conjectures regarding—say "Depth of Field."

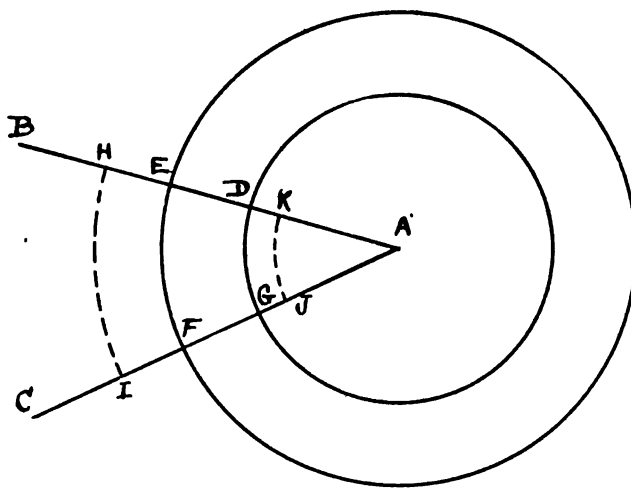
From Bolas & Brown on "The Lens" the following deductions are had. Taking a lens of 5-inch focal length:

(1) Use stop  $f/6$  and focus sharply on an object 15 feet away. Under these conditions the zone or field of sharp focus begins about  $10\frac{1}{2}$  feet from the lens and extends to 26 feet from the lens. This zone is therefore  $15\frac{1}{2}$  feet wide.

(2) Use the same stop and focus sharply on an object 25 feet away. Under these conditions the zone or field of sharp focus begins about  $14\frac{1}{2}$  feet from the lens and extends to  $87\frac{1}{2}$  feet from the lens. This zone is here 73 feet wide.

(3) Stop down to  $f/8$  and focus sharply on an object 15 feet away. Under these conditions the zone or field of sharp focus begins about  $9\frac{1}{2}$  feet from the lens and extends to  $35\frac{1}{2}$  feet from the lens. This zone is here 26 feet wide or  $10\frac{1}{2}$  feet wider than with stop  $f/6$  in example (1). It also commences about one foot nearer the lens.

This illustrates the effect of the smaller stop. Example (2) illustrates the effect of focusing on an object at a greater distance.



Suppose the lens to be at the point A in the accompanying diagram, and that it will cover on one hand up to the line AB and on the other to the line AC, also suppose that the line GD is  $10\frac{1}{2}$  feet from the lens, and the line FE is 26 feet therefrom. In the area D, E, F, G, we have the zone of sharp focus under example (1). This area—under the conditions of example (1)—is the stage or platform on which the objects of our picture must stand; on which we must compose our picture. All beyond it is back ground.

By stopping down to  $f/8$ , as in example (3) this "stage" would assume the proportions H, I, J, K, being 26 instead of  $15\frac{1}{2}$  feet wide.

By doing as in example (2), we would have still another adjustment of it. We thus have unlimited facilities for shifting our "stage" or the "field" of the picture.

In the light of the foregoing, study Matheson's "Milking Time" in the November number. Circling from the dog on the left to the man on the right, all are on the "stage." The trees beyond are back ground. If the "stage" had been deepened so as to more nearly approach these trees, would there have been less distortion in their rendition? Would such have improved the picture?

Also apply our "conjectures" to the charming Portfolio, No. 2172. Is there not here a hint toward the securing of "atmosphere?" But alas, there is a "fly in the ointment." It is that buzzing statement of Mr. Boyd's article that under the conditions of our example (3) all objects, 27 or more feet away would be sharp. I wonder if he was speaking exactly, or only meant that for practical purposes, all would be sharp.

Come and help us, ye who know.

Yours in darkness,

R.

[We are very glad to hear the views of our readers at any time, and nothing would please us better than to have opinions, favorable or otherwise, about our pictures or articles, expressed to us. We are especially interested in the above correspondent's plea for more simplicity. While we are trying to make our articles comprehensible to all our readers, it is often difficult to induce an expert on a subject to go into details which have become second nature to him, so that he can scarcely conceive of the need for emphasis on them. Yet it is these very things, oftentimes, on which success or failure depends.

We invite questions and correspondence, and assure every reader that no point or question will be considered too simple or elementary for attention.

Mr. Boyd's statement as to the distance beyond which all is sharp is one of real utility, but assumes that the camera is focused to bring distant objects into sharpness, rather than on objects 15 or 25 feet distant as our reader does in his examples. There is thus no back limit to the "stage," and care need only be taken to keep the objects back of the front limit of sharpness. In this connection we quote from a recent number of the *Amateur Photographer*:

Every photographic worker can himself find by observation or trial a distance beyond which everything is in a sufficiently good focal adjustment to suit him personally, but apart from the influence of lens and stop on what a certain section calls "hyper-focal" distance, the aesthetic element steps in, and what a pictorial worker may look on as desirable in one case, he may disapprove in another. In spite of all this, it is a matter of convenience for the hand camera user to be provided with a table of distances upon which he may focus, with some hope of securing what an "average" or "distributed" person may regard as reasonable sharpness in all beyond. The complication of the matter is enhanced by the various standards of sharpness that are in use and slightly differing ideas as to the exact definition of "hyperfocal" distance; indeed, in reality, or absolutely, there is no "hyperfocal" distance; but we must tolerate the term much as one tolerates the "infinity" of the camera maker.

The note then goes on to quote "a delightfully simple and easy method, which Dr. Lindley Johnson gives for finding the hyperfocal distance for an  $f/8$  lens when the standard is to be a circle of confusion of  $1/100$ th of an inch."

The focal length in inches is squared and gives the hyperfocal distance in feet. A six-inch lens at  $f/8$  or U. S. 4 will have a hyperfocal distance of 36 feet. For a circle of confusion of  $1/250$ th of an inch, we multiply by  $2\frac{1}{2}$ , giving 90 feet. For other apertures, Dr. Johnson gives a rule which Mr. Bolas, whom we are quoting, thinks to be wrong, adhering to the usual method, which is as follows:

"If we double the diameter of the  $f/8$  diaphragm by making it  $f/4$ , the hyperfocal distance will be doubled, and will become 180 feet, and on the other hand, if we halve the diameter of the stop, making it  $f/16$  (or U. S. 16), the hyperfocal distance will be halved, and so becomes 45 feet." This halving is repeated each time the stop is doubled.

The simple rule can be easily remembered. Multiply the focal length of the lens by itself—thus, for  $f/8$ , 5-inch lens, 25 feet; 6-inch lens, 36 feet; 8-inch lens, 64 feet, and so on.

[As to the question of background in Mr. Matheson's picture, we invite expressions of opinion from our readers—Eds.]

### WHAT IS A "GENRE"?

ROCHESTER, N. Y. Nov. 30, 1906.

Dear Sir:

I see in the November number you spoke of "Portraits," and I suppose you meant me. Well, you can give another just like it in the December number on "Genre," as I do not know what kind of a photograph belongs to that class; and I suppose there are many others. Some may think they know, but don't.

How would it be if you would explain or give an idea of the kind of photograph belonging to each class? Perhaps that was the reason the September competition proved a failure, those that did know the meaning of "Marine" had none, and those that did *not* had some, and never knew it.

I just thought of this while writing the first few lines, and thought I would speak of it.

Yours truly,

ONE WHO WANTS TO KNOW.

[We shall admit to the class of genre pictures any which tell a story. Figures in costume representing fictitious or historical characters, and persons or groups represented in action, are genre. The line between genre and portrait is often hard to draw. For instance a famous writer shown busily working, would be a portrait, while a child writing a letter and titled, "Writing to Santa Claus," might be ranked as genre. In general, however, a portrait must represent the individual as himself, with the rendition of likeness or character the object in view, while the portrayal of an action, an incident, or an assumed character is genre.—Eds.]

Shrinking from the task of dictating a reply to all who have remembered us with kind wishes and expressions around the festive season, the editors join in wishing to each and every reader of this magazine

A HAPPY AND PROSPEROUS NEW YEAR.

## Readers' Contribution Box.

### VIGNETTE NEGATIVES.

Vignette negatives are sold by European dealers, but I do not know if they are obtainable in this country. I have found them very useful and they may be easily made as follows: Upon a white card mount a piece of paper, say light blue; upon this again a darker color, and lastly a black piece of such a shape as is consistent with vignetting mask required. The size of the copy is immaterial. A negative is then taken of it, a small stop being inserted to prolong the exposure, and during the whole of the time the camera should be racked in and out an inch or two, so producing a negative not sharp, but in which the edges of the various papers are beautifully vignetted into each other. By placing the negative so produced in proper position in the printing frame during the operation of printing vignettes of the softest and most uniform character will be produced, even if printed in the sun.

F. C. BRYANT.

---

### HOME-MADE BACK-GROUNDS.

The improvised back-grounds most usually recommended in the numerous articles on home portraiture occasionally published in the photograph magazines have caused many tyros to give up in disgust and discouragement that interesting part of amateur photography, by recommending the use of dark blankets, sheets, etc. They have more than once almost discouraged the writer into giving up that most enjoyable part of amateur photography.

I have made for myself two back-grounds, one a bluish white and the other a dead black, and for the benefit of those who would like to enjoy making home portraits (as good, if not better, than some professionals turn out), I will endeavor to explain how you may with little expense and the like amount of work provide yourself with a back-ground that will make your portraits pleasing to the eye, and if I am not mistaken, enthruse you more on this branch of photography.

First secure two pieces of hard pine  $\frac{7}{8} \times 1\frac{5}{8}$  in. or thereabouts, each 14 ft. long, and make yourself a frame six feet square. With the ends left from these pieces you may brace your frame at each corner, which, of course, should be mitred, so that the surface will be flat.

Then secure four yards of unbleached muslin one yard wide and make a cover for your frame, cutting the muslin into two separate pieces of the same length and seaming them together with good strong thread. Lay the muslin out upon a floor and place the frame over it and proceed to fasten the muslin onto the frame on the back side. After attaching the muslin, tightly stretched to the frame, it is ready for painting.

At any paint store you can purchase ten cents worth of whiting and half that amount of blue and the same of ground glue; use about four ounces of the glue to enough water to cover it, or a little more and bring to a boil or until the glue has thoroughly dissolved. Now, add your whiting and enough hot water until it is about the consistency of ordinary paint, and bring it once more to a boil, stirring it thoroughly. Now you may add your blue and again stir until it is mixed completely with the white. One word of caution is necessary right here and that is to be sparing of the blue for it dries much lighter than it is, while it is being mixed, or after it has been painted upon the muslin; a good way to determine when you have enough blue mixed in, and that is to take and paint a small stick of wood and let it dry near the fire, which will only require a few moments, and should, when dry, have a faint blue tinge, such a color as a bright sky, enough to distinguish it from white draperies.

It is now ready to be applied hot to the muslin, and should be done very energetically and thoroughly. When the muslin has dried it will have shrunk from the application, and remain tightly stretched over the frame, and can be shrunk again at any time by painting the back with hot water. Should you desire a black back-ground, you may secure it by substituting lamp black for the whiting and blue, and proceed the same as for securing the white back-ground.

R. S. TURPEN.

---

### HINTS ON COMPOSITION.

The most important feature in the composition of a picture is the placing of the principal object of interest. Never place it in the centre of the picture or close to the edge. The rule says: Place it about two-fifths from the right or left-hand side. It will not always be the largest object in the picture, but one of most interest—the one to which you wish to attract the eye of the spectator. To especially mark it out as interesting you must endeavor to get the lines of your picture to converge toward it. This brings us to the composition of lines.

Never get the lines running up the centre of your picture. Get them running to one side or the other.

When taking the picture of a house get a little on one side and put the house in the perspective. This rule applies to street scenes. Never get the street running straight up the centre of the picture.

Never get the horizontal line exactly in the centre. Where the foreground is important have this line about one-third from the top of the picture. Where wide or extended views are wanted the line should be about one-third from the bottom.

W. J. MORGAN.

## HINTS FOR BEGINNERS—EXPOSURE.

BY BURTON H. ALLBEE.

What beginner ever understood the directions regarding exposure which were given him, either by an experienced friend or from the elaborate circulars which are sent out by manufacturers of plates and films? And upon correct exposure more than anything else, depends the success of the negative. The best procurable apparatus, combining all the latest improvements, with the most expensive plates or films will not make a good negative unless the exposure is right.

The trouble with most beginners is that they get the snapshot idea into their heads and under-expose. Experienced workers, realizing this fact, lengthen their exposures accordingly, and in proportion as they do this the quality of their negatives improve and their prints more and more resemble those made years ago before rapid plates were known. While not as much time is required now as then even rapid plates require more time than they usually get.

The point of this argument is found in the fact that if a plate is under exposed no manipulation in development can produce a good printing negative. If a plate is over-exposed manipulation in the developer will enable the operator to make a fair, possibly a good negative. If a plate is correctly exposed the resulting negative will make a perfect print.

This is the situation that confronts the beginner as he takes his first camera into the fields for the first time. The directions of the makers of the plate indicate that it is very rapid, and an extremely short exposure will suffice. The tendency in each instance will be to under-expose, yielding a negative with only great contrasts and without the delicate gradation in tone which make satisfactory pictures.

How long should the exposure be? It is impossible to lay down a rule which can be followed. The time varies with every hour in the day and every day in the week. It varies with the time of year, the latitude and the altitude, hence it will be seen that the subject is one of great difficulty. There is only one way to overcome it, by long and careful experiments and comparison. It must be learned, as everything else is learned, by personal observation, and by actually doing the work. It will require a good many boxes of plates to become proficient, but once the knowledge is acquired it will be invaluable. Consuming plates in experiments at the beginning will save plates in the future, and what is of greater importance, it will save pictures which might otherwise be lost. Experience can be quickly acquired by selecting a subject of more or less typical character, carefully observing the character of the image on the screen, and then exposing different parts of the same plate for different lengths of time in the well-known and often described manner. After development and fixing you will observe which exposure has given the best result. Do this carefully with three or four subjects and you will not only gain more knowledge about proper exposure, but



what is equally, if not more important, the way in which a plate behaves in the developer.

There are numerous exposure meters on the market, all possessing more or less good points, but, as a rule they are all speeded too high. A substantial percentage needs to be added to the time indicated, otherwise under exposure is certain. This is particularly true in the figures given for cloudy days. In bright sunshine they are practically correct for the brands of plates known to be fast. The slower plates will require a longer exposure than most of the meters give.

To attempt to lay down rules for exposure is futile. One must experiment and observe long and persistently. Keep a note book and set down the length of exposure, and then complete the record by setting down a description of the quality of the negative. The record should include the time of year, the time of day, the quality and direction of the light, the size of stop, the time of exposure and the brand of plate, otherwise it is useless. Then finish by putting down the quality of the negative. With a note book full of such information the beginner can scarcely go wrong and his work will steadily improve.

Do not, in timing exposures, rely upon the figures on the shutter. Few of them are accurate. Sometimes four different speeds are the same. Sometimes they are slower, sometimes faster than the figures indicate. Which ever they may be the negatives are likely to be disappointing if these figures are followed without first testing them for accuracy.

After all, the best way to make satisfactory pictures is to set your shutter on "time" let it stay there and learn to time the exposure without reference to the figures on the shutter. If this is done the operator will acquire expert and valuable knowledge, he will be able to work independently of any system of speeding a shutter and his prints will possess the delicate gradation of tones which are essential in a good picture.

---

## PHOTOGRAPHY AT GREENWICH OBSERVATORY.

PROFESSOR MAUNDER'S "TRAILL TAYLOR MEMORIAL LECTURE."

POSSIBLY it was owing to the fact that this year's Traill Taylor lecture was of a more popular character than usual, that the attendance at the New Gallery, when Professor E. W. Maunder described the uses of photography at Greenwich Observatory, was so much larger than on previous occasions. Sir Henry Trueman Wood, who was in the chair, made a passing reference to his long-standing friendship with Mr. Traill Taylor, and mentioned that he first met him in 1872, at a time when the photographic world was a very small one, and the sense of comradeship among those who practised the art was made all the more keen.

Professor Maunder has been a member of the staff of the Royal Observatory at Greenwich for over thirty years, which period is practically coincident with the growth of photographic observation in astronomy. Astronomy was the first of all the sciences, Mr. Maunder pointed out, to make use of photography. On

the invention of the Daguerreotype process, Daguerre himself attempted to photograph the moon. His attempts were failures, but in the next year, 1840, Dr. J. W. Draper succeeded in taking a lunar photograph. The next step in the application of photography to astronomy was taken in 1845, when the first photograph of the solar spectrum was obtained. A little later Secchi made the first photograph of a total solar eclipse. Afterwards came Fox Talbot's calotype process, by means of which paper was rendered sensitive to light. A process dealing with a substance like paper lent itself very readily to one particular class of observation, namely, continuous registration of the movements of certain instruments. And it was to facilitate this purpose that photography was first introduced into Greenwich Observatory.

Mr. Maunder said that photography had three main applications in the work of the Observatory: (1) continuous registration of certain movements of instruments; (2) the pictorial representation of objects which contain a vast number of details; (3) the making of rigid measurements in order to determine exactly the places of the celestial bodies. As representative of the first class the movements of the magnets may be taken; of the second, the daily photographs of the sun; of the third, the great photographic chart of the heavens. The first magnetic observatory was set up in Greenwich Park in 1838, and at that time a record was obtained by reading the position of the magnetic field every two hours. Direct eye observation was sufficient to show certain movements, such as an easterly movement during the night and morning, and a westerly movement during the summer and a lessened one during the winter. But with developments in photography the fluctuations of terrestrial magnetism were much more accurately registered. The work is done in the cellars of the Observatory; a beam of light reflected from a mirror on the magnetic instrument is cast on to a cylinder round which the photographic paper is coiled. The cylinder is made to revolve by clockwork, and, the paper being sensitive, a line of light is traced upon it. Mr. Maunder showed a photograph of one of the earliest of these registration sheets, showing double tracing, very discolored owing to age and the imperfections of the process. The hours were marked by a periodical cutting off of the light, and then it was possible roughly to estimate the times of the intermediate parts of the trace. Afterwards the clock was made to interpose the shutter once every hour. Now by means of elaborate rulings it is possible to find the position of the magnet at any moment.

Much the same method of the blackened trace is employed to register continuous readings of the thermometer and barometer. Photography is also used for the registration of earth currents. The records taken at the three stations associated with the Observatory in South London show usually nothing more marked than the tremors set up by the City and South London Railway. But these tremors are periodically knocked all to pieces by great cosmical disturbances or magnetic storms, which in some cases are sufficiently violent to interrupt the cables. The peculiar thing about these magnetic storms is that many of them spring suddenly from a point of rest, move one hundred times as quickly as the ordinary diurnal movements, and often occur after mean intervals of  $27 \frac{1}{3}$  days. This fact has led to various discoveries which could never have been gathered save by continuous photographic registration.

The first application of photography to the work of pictorial representations of the solar surface was not made at the Observatory until 1873, as it was not considered within the programme of Greenwich Observatory to take note of planetary or solar markings. The first instrument employed was the Kew photoheliograph, having a telescope  $3\frac{1}{2}$  in. in aperture and 4 ft. in focal length. This

was replaced by the Dallmeyer photoheliograph, giving an image of eight inches to the sun's diameter. The great essential of all successful photography is that the photographer should have perfect control of his plate, but while in ordinary work the difficulty is to get sufficient light, in solar photography the difficulty is the presence of too much light. In order to get control of the plate it is necessary to under-expose. In the old days this was attained by using a slow plate, sensitive to only a few rays in the spectrum, those in the neighbourhood of G; even less than the four inches' aperture was generally employed, and by this means control was gained. When the image came up it would begin from the centre of the sun, and frequently when completely developed, it would not reach out to the limb. That is to say, the difference in illumination between the sun's centre and the sun's edge was so exaggerated by the photograph that the limb did not record itself. At the present time an aperture of nine inches and a focal length of nine feet are used, and the image is  $7\frac{1}{2}$  or 8 inches in diameter. The dry gelatine plate was introduced into this work in 1884.

An attempt is made to get a photograph of the sun either at Greenwich or the observatories in association with it in other parts of the world on every day of the year. This has not yet been done, though only one day was missing from the record in 1905, and thus far in 1906 there has been no break. Speaking of sunspots, Mr. Maunder said that the largest sunspot group ever photographed at Greenwich had an area of four thousand millions of square miles.

The most strictly scientific use of photography at Greenwich has the object of making rigid measurements of celestial bodies. In this way a photographic catalogue of the sky has been prepared. Using the Standard telescope, with twenty-six inch refractor, and giving two hours' exposure, it is possible to see the nebulae coming out in their full intricacy and mystery of form. Between five and six hundred minor planets, between the orbits of Mars and Jupiter, have also been tabulated. Most of them are of little value to astronomers, but from one of them, Eros, important calculations can be made. To locate and photograph a little planet no bigger than a thirteenth magnitude star is a work of considerable delicacy. Four exposures are made, the instrument being slightly shifted each time, so that the result in the case of a fixed star is four images in a square, while in the case of a planetoid, which has been moving, in addition to the movement of the telescope, the field is an irregular one. Thus the planet is instantly "captured." In a similar way photography is of service in measuring very minute satellites, like those of Neptune, for example.

The most interesting observations of all, however, is that of the latitude and longitude of the surface markings on the sun, which gives us the solar rotation period. This period, as viewed from the earth, is  $27\frac{1}{3}$  days—the actual period is slightly shorter, but it appears longer to us because the earth moves in the same direction as the sun—and this length of the solar day exactly corresponds to the frequently recurring interval between the magnetic storms. In this way Mr. Maunder thought that the three phases of photographic work at Greenwich were linked together. The continuous registration showed magnetic storms; the photographs taken for rigid measurements showed the period of solar rotation; and the pictorial representations of detailed surfaces showed stream liners emerging from the corona at certain periods. The coincidence of time, the probability that these straight lines from the sun overtake the earth in its orbit, and set up magnetic storms, and the evident connection between the three phenomena give us a new conception of solar physics which we owe entirely to photography, for no other method of observation would have been equal to such a discovery.—*Amateur Photographer (British.)*

## Our Portfolio.

Prints for criticism in "Our Portfolio," only one at a time and only one each month should be sent to DR. JOHN NICOL, Tioga Centre, N. Y.

2203. C. F. FISHER.—Of the three prints of the unnamed subject we prefer the medium trimming, and that mainly because of its including less of the white water on the left. The subject is attractive and the point of view well selected, but the values are far from true. Even in "hazy sunshine" there could not have been anything like the contrast between the dark foliage and the very white sky; the perfect white of the latter showing clearly that all the rest must be out of tone. Double the exposure requiring only, say, half the development would have given just the natural sky and properly lighted foliage of the subject at the time of exposure. Sky was never so white or foliage ever so black in any kind of daylight; and it is all the more a pity as with the longer exposure and shorter development suggested you would have had a really fine picture.

2204. W. E. ELDRIDGE.—"The Old Mill" is a poor subject poorly photographed, sky and water being little else than white paper while the horizon line runs straight across the print. Indeed we know that the lower half is water only by the reflection of the foliage, and the purely white sky proves that all else cannot be right. Always select a point of view that will break up a straight horizon line; and when you find reflections such as those here they should be broken up by the throwing in of a stone or in some other way so as to convert the reflections into shadows; and expose long enough to get all desired detail in developing before the sky and water become so white.

2205. Rev. H. A. SPENGLER.—"Autumnal Wood," properly photographed, would have been a fine picture, but as it is it is little better than worthless. Dull grey without contrast of light and shade as if buried in fog; close examination being required to see anything in the shape of composition; even the high glazing fails to show the desired detail necessary in such subjects. Nothing stands out from anything else nor is there anything of more importance than another, nor is there anything suggested more than is seen; so that taking it altogether we are constrained to say that we can make nothing of it except that it is not worth printing.

2206. F. HOFFMANN.—The unnamed print, a row of corn shocks, is neither picturesque nor pictorial, and the sky of white paper is proof if nothing else were wanting that the values are altogether wrong. A close examination of the print shows that such parts as were in direct light are simply white, while such as were in shade are simply blackened paper, as black as paper can be made. A longer exposure and shorter development was required to give anything like true values, and it should never be forgotten that nothing short of sufficient exposure for the shadows can produce a photograph worth printing. Aside from the too short exposure this is faulty in its composition, the corn shocks forming a straight row across the print and up to about a third of the top, leaving about two-thirds of an uninteresting foreground, two thirds of which had much better been included in the sky, especially had the sky been anything like what it should.

2207. J. W. SMITH.—"Mill-Dam." We take it for granted that you see the faults of this as well as we, and that you send it merely for information as to how to avoid them. Sky and water are simply white paper as is the water falling over the dam, indeed that the foreground is intended to represent water we only know from the reflections. The subject is fairly good and might have made an equally good picture if the point of view had been sufficiently changed to place the dam not quite so much in the middle of the composition.

The main fault, however, is under exposure, exposure so short as to induce you to continue development till water and sky are simply white without getting the matter in the shade sufficiently developed. Give a longer exposure, keep the dam a little lower so as to diminish the foreground and increase the sky, and stop development before the lights are all equally opaque, and you will have a fairly good little picture.

2208. G. E. PRAGMELL.—"Maryland In November." We cannot say anything in favor of this because the trees are as black as midnight and the objects on the left are so improperly focused as to make it impossible to say what they are. Learn to focus better and to expose and develop correctly. Although you have only a hand camera there is no reason why it should not be supported by tripod or otherwise, so as to give sufficient exposure; and as you are anxious to do serious work we would recommend you to get an exposure meter, one that is also an actinometer. It is somewhat difficult to judge, but we be-



2208

G. E. PRAGMELL

lieve the negative from which this print was made has not been sufficiently developed. Send again and we shall be glad to help you. Try the same subject again, as you can make a real picture here.

2209. JOHN HAGUE.—The portrait of a girl looking at a bunch of flowers only needed a shade better lighting on the right side to be charming. Pose, expression and arrangement are all that could be desired; and if, as we suppose, it be a home exposure, a little further from the source of light and better reflection on the darker side would have made all the difference. It is well to remember also, that such white dresses are always better developed in weak solutions. Not only must exposure be made for the shadows, but development must always be made to suit the lights.

2210. W. MCCLEARIE.—"The Boathouse" is hardly a subject of sufficient importance, especially when it has not been well photographed. An uninteresting building mostly roof and all under its shade simply black as is also the clump of foliage on the left. Probably three times the exposure given was required, and then development stopt before the sky was rendered opaque so as to print quite white. Learn to see, that is, to know what will

and will not make a picture, and then always expose for the shadows and you will get all you want before development has made all the lights equally white.

2211. C. H. BROOKS.—"Cow Path in the Pasture" is so badly focused as to be nothing but a conglomeration of undistinguishable material in which neither path nor anything else can be made out. It has probably been made by a hand camera without properly judging the distances on the focusing scale; but why you should have sent it to the Portfolio is a puzzle of which we can make nothing.



2209

JOHN HAGUE



2203

C. F. FISHER

2212. H. M. LORD.—"The November Orchard." We ought to condemn this as being altogether an impossible rendering, as never were apple or other trees so black with a sky so white; so black as a whole is it that there is a difficulty in saying whether the black masses are boulders or swine eating the fallen fruit, although we are inclined to believe the latter. But we have gone to it again and again and the oftener we come the less are we inclined to the aforesaid condemnation, indeed we may say the better we like it. Across the midnight darkness there are two or three streams of a lighter shade, especially one in the immediate foreground and another in the middle distance, that attract our attention and keep it, insisting, as it were, that the author had more in his mind than we have

yet discovered. In short, however opposed to nature, we cannot avoid liking the picture and mean to go to it again and again in the hope of ultimately seeing in it just what he wanted us to see.

2213. MATTIE MITCHELL.—"An American Jap" is hardly up to your previous work, the title itself prejudicing us against it from the fact that an American cannot be made to look like a Jap, and this is less successful than any attempt that we have ever seen. As a portrait it is heavily handicapped by the obtrusive white ribbon behind the head compelling attention and attracting it from the face which is otherwise almost faultless. The offending ribbon, we know, is fashionable, but not with the Japs, they are far too artistic to spoil the outline of the head with anything so absurd, and although it is now worn by most American girls it should be discarded in portrait work. Without the ribbon and the head placed a little higher in the print we should have had nothing but praise for it. Please notice the heading of this column in future and send direct to Tioga Centre.

---

### Camera and Dark Room Picture Criticism.

---

Prints for this department should have the name of the sender and the working details written upon the back and be addressed to J. P. CHALMERS, 361 Broadway, New York City.

Our thanks to Wm. H. Zerbe for picture postcards representing "The Night Before Christmas," a flash light picture of two little Zerbe's waiting at the chimney corner for the appearance of Santa Claus. Although rather late we re-echo the kindly greeting on the card.

FRED STROHSCHNEIN.—"Bread, Milk and Honey" is a subject that makes the mouth water and you have rendered it with good technique. Still life subjects of this class are perhaps the lowest form of art and are only valuable as practice studies. We would like to see your work in other directions. We pay for good prints for reproduction when accompanied with a short description of the methods of work or full details of materials and exposure which would make the picture interesting and instructive to others.

H. L. SMITH.—Thanks for kind words of appreciation; be good enough to repeat them to your friends. The "Snow Scene" is a fine specimen of snow rendering, but the composition is faulty, all the lines running out of the picture. By toning down the sky a little, to give a variety of tone from the white snow, you will greatly improve the effect.

NEMO.—"Shadows" and "The Brook" two 5 x 7 prints without any name on the backs mainly masses of foliage fairly well photographed. In each there is a silent pool with strong reflections, which in this case is simply black paper. How easy it would have been to have caused ripples on the surface by throwing in a few sticks or stones just before the exposure, then the dark shadows would have been broken up and we would not be left to guess that the masses of black and white must be water.

JOSEPH BROMMELL (Manitoba).—We re-echo your kind sentiments. The 4 x 5 print of "Interior, St. Luke's" is really a gem of perfect exposure, development and printing, all except the careless stains on the print which render it unfit for reproduction. Printing out papers must be handled with clean fingers and in clean dishes. The four Brownie pictures prove that this little camera is capable of good work when skillfully handled. When your negatives are thin such as the one in which the boys are hugging the dog and "We Three" you can get far better prints by using a developing paper of the carbon grade.

W. W. BRACKENRIDGE. "Kodak Fiends" is such a silly conception and so inferior to your other work that you surely did not send it for serious criticism.

ERNEST J. SALOMON.—Of the four prints, "Down in the Chasm" is by far the best and is an excellent record picture of a difficult subject. In "Rainbow Falls" you have succeeded in obtaining an excellent representation of falling and turbid waters, and although you give the time as 1-25th second we are of the opinion that the shutter actually worked much slower. Still, while slow enough for the water, it was not slow enough for the rocks and landscape with the f-16 stop and you could have used a larger stop to good advantage. "Placid Waters" is from an under-exposed and over-developed negative or else you have



2213

MATTIE S. MITCHELL



W. R. HASLAM

Seed Iso plate. Time, 2 sec. af f-8. Print on Carbon velox. Day bright but cloudy.

bleached out the detail in the re-developing process, and the same may be said of "Adirondack Waters." In all four there is evidence of good taste in the selection and composition and we hope to see still further improvement in your next.

L. W. WAGENHORST.—"A Winter Night" is an excellent representation of the subject and so well answers the query of another reader that we reproduce your picture with the data, exposure twenty minutes, stop 4. It occurs to us that the negative is slightly over-developed as while there are halftones and detail in the shadows, this quality is rather lacking in the light portions and what is white is pure white. "The Curve," a good photograph of a dangerous curve on a railroad track, is of topographical interest but otherwise not worth a plate.

W. R. HASLAM.—"Out-door Portrait," a young lady standing before a background of leaves, is encouraging although somewhat harsh in tone values. The most noticeable defect is that the camera was not high enough, consequently the figure appears abnormally tall and the head is too high as shown in the effect of the nostrils and the chin. A less self-complacent pose would also be an improvement.



W. R. HASLAM.—"High Bridge," New York is fairly good. The composition is well handled and there is evidence of good taste in the printing and mounting, but there is a lack of color that stamps as being crude what might, with correct tone values, have been a perfect rendering of an interesting subject. Beware of brilliancy in your prints when it is obtained by such sacrifice of tone values.

L. C. WILSON (Kansas).—"Boating in December" is a dream such as we in the north cannot realize, and you have made an excellent rendering of your subject, with one or two exceptions. The technique of this is very good; the foreground is in focus, the water is well rendered and the gradually increasing softness of the distance gives a sense of atmosphere. The main defects are the position of the boat which you have placed exactly in the centre but the reproduction is trimmed so as to place it in a little better position. Then the attitude of the persons seated in the boat is extremely wooden—they are not rowing, but posing. You will also notice that we have removed by abrasion with a rubber an ugly branch that protruded from the sky, this you could have done by dodging in the printing. Sorry we cannot speak as highly of "Only a Mill Pond." Here you have an expanse of badly rendered water in the foreground. There is no support or balance to the streak of landscape beyond and the extreme distance is of wiry sharpness, while the nearer portions are blurred, just the reverse of what they ought to be. We are flattered by your opinion of the magazines but at this particular time we ask it as a special favor that you repeat the same remarks to your friends who are interested in photography.

NO NAME.—"Winter in Central Park" is a landscape that comes nearer to being perfect than most of the pictures we receive of similar subjects. The details are Forbes ortho plate, 2 seconds at f-16, good light, pyro developer and Kresko print. We have nothing but praise for the technique and can only suggest that a slight darkening of the sky would improve the effect.

JESSIE L. RUSSELL.—No need to apologize because your pictures are made with a No. 2 Brownie. In skillful hands these instruments will yield just as perfect results as larger outfits, at less cost for experimenting, and when you get something good you can have it enlarged. The children playing would make a good enlargement and seems to be from a perfect negative. The other two in which buildings appear show that you do not hold the camera level—notice how the walls are falling in. The portrait is under-exposed; use the time lever on portraits, especially at this time of the year.

J. H. MCCROSSAN. "In Victoria Park" shows an over-exposed velox print from a negative that has been under-exposed and over-developed; lacking so much in tone values that it ought to be pronounced a failure, even if the two men idly staring at the camera in the centre of the view did not stamp it as such. "The Picnic Party" is better photography (although the negative is also too harsh) and the group is well arranged; but it looks so silly to have the six men and seven ladies all smirking at the camera and trying to look their prettiest. Of course one of the ladies had to keep her eyes on you, but it would have been a good group if the others had divided their attention between themselves.

WESLEY BROWNLEE (Canada).—"Interested" a picture showing a man intently studying the pages of *Camera & Dark Room* is very promising work for a beginner. The pose is natural, the head being supported by the hand, and the pose, features and expression reminds us strongly of a certain photograph of Sidney Allan the art critic. What we dislike about it is the prominence of the ear which is almost as large as the hand; this is due to distortion, the camera having been focused at a distance of three feet. Otherwise the technique is fair and it may interest others to know that the picture was made with a Premo camera on a Stanley plate, and the exposure 4 minutes by lamplight with the full opening of the lens. Print on sepia toned Argo paper.



High Bridge, N. Y.

W. R. Haslam

Eastman N. C. Film, R. R. Lens, f-8, 1-5 second, Yunit Paper.



Boating in December

L. C. Wilson



DOWN IN THE CHASM

ERNEST J. SALOMON



THE CHRISTMAS STORY

A. H. SEIFERT



Rainbow Falls

Ernest J. Salomon



A Winter Night

L. W. Wagenhorst

Exposure 20 minutes, stop f-8 (U. S. 4).



87 YEARS

WILL D. BRODHUN

First Prize, Monthly Competition.

UOP



ARITHMETIC

W. J. SCALES

Second Prize, Monthly Competition.

• • • • •  
• • • • •  
• • • • •

WALTER E. ELDRIDGE. "The Brook" would make an excellent testimonial for the makers of the lens in your kodak, showing, as it does, wiry sharpness over the whole picture, and the nearest and most distant objects equally sharp. It is a good picture of the record variety, but of a subject without interest. Now that you have so well mastered technique we advise you to study the work of others and try to obtain some picture quality in your work.

HARRY H. PHILLIPS.—"After the Storm" and "The Creek in Spring" are both very good for such short experience and your reading has not been wasted. You are on the right track and we hope to hear from you frequently. The color values in the first shows that it, too, would have been better if the dark color screen had been used. The composition of the second shows good taste, and the tone values and harmony of the picture prompt us to lay it to one side for reproduction later.

A. G. HOLCOMBE. "The Snow Team." There is a standstill, undecided effect in this that is against it. A picture of this class should show action to be effective. A redeeming feature is the good tonality in the print, which shows that you know how to time a snow picture and when to stop development. "Leisure" is also of excellent technique, but the subject and arrangement is far from being picturesque. As a good record it is a success, but, seeing that you have mastered technique, we would advise you to study the work of others for pictorial inspiration and send us something of a higher standard in the near future.

HOLLEY JACOBUS.—"The turn in the Road" is a pretty good selection, but we do not understand why you should have given 5 seconds exposure at f-32 when  $\frac{1}{2}$  second at f-8 would have been better in every way. The horse and carriage is in a very awkward position and should have been coming or going and a little nearer to the camera. Seeing that you used a ray screen we would expect something else than pure white paper for the sky, and in making other prints, try masking the landscape and print in a little color in the sky, gradually darker towards the top. Hope to hear from you again. Kindly repeat your good opinion of the magazine to your friends.

A. H. SEIFERT.—Wishing you a "Happy New Year" in return and thanking you for the kind words. The exposure of about a second at full opening of the lens seems to have been about right and "The Christmas Story" is a very good specimen of at home portraiture. The slight movement of the child is the only defect. When photographing any person standing it is advisable to place behind them some solid article of furniture against which they can lean as the body will sway unless the exposure is shorter than can be given with the light of a single window. The expression and pose is natural and you are working on the right lines.

J. LANE (Canada) writes that he has been a constant reader of *Camera and Dark Room* for five years and sends his first batch of (12) prints for criticism. This is too many to notice all in one number in fairness to others and we will refer to the others in future. Picking out the two most faulty, "The Winding Stream" and "Falls in Reservoir Park" we should judge from the quality of the others that the defects in these two are already realized by you. The first is not worth printing, being so lacking in tone values as to be a mere caricature of nature. Halation, under-exposure and over-development are the glaring faults, also visible in the "Falls" and the latter also shows the folly of using a lens of too short focus in landscape work. The boulders in the foreground are rendered out of all proportion to the rocks at the other side of the pool and the inky shadows and wiry appearance of the falls clearly denotes under-exposure. Hardly less faulty in this respect is "The Stately Elm" although the selection and placing is all that can be desired. The "Interior of City Hall" is also short timed. In making interiors it is necessary to use a wide angle lens but equally



necessary to avoid having any objects close to the camera as the pillar on the right. "The Parliament Buildings" also suffers from the above defects, too strong contrasts and exaggerated perspective in the roadway. There is such a variety of quality in your prints that we imagine they are examples of each year's progress in your work and the others are so much better that we shall take pleasure in reproducing them in a later number.

NEMO.—Another nameless print with data, 1-25th second exposure, 16 stop, 4 x 5 Seneca camera, shows a wooden foot-bridge over a stream and a landscape that is well photographed but a subject of only local interest. Try for better tone values.

O. D. RAMSEY. "House Over the Hill" and the others are rather too harsh. Detailed criticism in our next.

---

## Our Table.

---

Books for review, apparatus and materials for examination and report, should be sent to Dr. JOHN NICOL, Tioga Centre, N. Y., or to any of the editors

CAMERA WORK, No. 17, for January, 1907. The first impression in reading over this number is that it is, if possible, more catholic than usual so far as its illustrations are concerned; we mean in the scope that it covers, including almost every phase of pictorial and artistic photography, from Dugmore's Fish and Rubincam's "Circus" to Keily's "Lenore." And they are each good, very good of their kind. Keiley's six pictures show that, like this number of the magazine, he is catholic in his tastes, that he is equally at home in various phases of art as nothing can be more different than are Lenore and The Last Hour and both what any artist might well be proud of. Herzog has two pictures quite up to his usual mark: "The Banks Of Lethe" and "Twixt The Cup and The Lip." They, as well as all of his work that we have seen show a wonderful amount of patient perseverance, especially when we consider his method of working as told by the editor of CAMERA WORK; but on us at least, the first effect that they produce is that they are copies from old engravings, having no sympathy with modern photography. The cause of this effect is well shown by C. H. Caffin in an article "Is Herzog Also Among The Prophets?" In spite of that, however, the pictures are wonderful examples of the beauty of line and arrangement; and are likely to command attention wherever they are shown. Rubincam's "Circus" is a wonderful example of photographic technique, a snap in which hand and eye synchronized so as to catch horse and rider at the opportune instant. Nor is Dugmore's "Fish in an Aquarium" a whit behind; indeed it is the most perfect rendering of any of the finny tribe that we have ever seen. In addition to Caffin's article on Herzog's work F. H. Evans gives a criticism of the late London Salon, much less favorable than some that we have seen; and seeing that in previous years he had been responsible for the hanging and arranging of the room, we hardly think his unfavorable expressions regarding it, when done by another, is very good taste. With exception of Caffin's article we do not think the reading matter quite up to the usual standard, but the pictures more than make up for it, and render the January number of CAMERA WORK as usual, worth far more than what it costs.

THE BRITISH JOURNAL PHOTOGRAPHIC ALMANAC for 1907, *Sales Agent in America, G. Gennert, New York.*

This is surely the cheapest twenty-four cents' worth ever published; twenty-four cents, however, only in the country of its publication, the custom house and other charges bringing it up to fifty cents here. But it is well worth it. Three pounds weight of closely printed

matter every line of which is well worth reading and every page of which conveys information well worth knowing and remembering.

There are altogether 1624 pages, 1104 being advertisements, and 520 of what may be called reading matter, including communicated articles, epitome of progress, novelties, formulæ, tables, lists of societies all over the photographic world; and many other things in the well-known words "too numerous to mention."

Taking it all in all, there is hardly a thing that a photographer would want to know but what he could find here; and we cannot imagine anything on which fifty cents could be so well and so profitably spent.

THE AMERICAN ANNUAL OF PHOTOGRAPHY AND PHOTOGRAPHIC TIMES ALMANAC FOR 1907.

Published by Styles and Cash. George Murphy (Inc.), Sole Sales Agents. Price, paper, 75 cents, postage 17 cents; cloth, \$1.25, postage 22 cents.

This, the twenty-first annual volume of what is now the sole American Photographic Year-Book, differs in no essential respect from its immediate predecessors. It resembles, very strongly, a bound volume of the magazine from which it takes part of its name. Undoubtedly, there is much of merit in the articles, as well as much of ephemeral value, but there is no real contribution to photographic knowledge. The great value of the book is as a handy volume of reference where may be found all American manufacturers' formulæ, and as such we have often occasion to use it, and keep it on a handy shelf.

Of the pictorial contents we are loath to speak. There is here much of real merit, and little that is not worth reproduction, either for its own sake or as illustrating an article. The selection of pictures does not represent either American photography or its progress during the year. A far better representation of American pictorial work can be found in a foreign year-book. It seems a pity that no adequate representation of American work is to be had in an American book.

To sum up, however, we have read the book through with interest and enjoyed its pictures. We shall use it often as a source of information. We commend it to all our readers on these grounds, and wish it as much success as it has had in former years.

PHOTOGRAMS OF THE YEAR 1906. London, Dawbain and Ward; New York, Tennant and Ward. Price, paper, \$1.00; cloth, \$1.50.

Once again comes to us this excellent pictorial annual, better than ever before. The typographical arrangement has been altered, the text being printed on soft, dull-finish cream-colored paper, with only the half tones on the glossy coated paper which is needed to bring out their beauty.

The American workers are written of by Roland Rood, for the East, F. J. Clute, for the West, and H. Mortimer Lamb, for Canada, and the selection of pictures is representative of the work of all schools. The other articles treat of photography in Spain, France and Australia, and the usual review of the English exhibitions.

The standard reference book of pictorial photography of the world.

"With The Camera," the monthly circular from the Illinois College of Photography, shows, as usual, that the students know how to combine amusement and pleasure with work. Those of them who belong to the Y. M. C. A. have added to their new quarters a fine piano from which they are deriving much pleasure; the basket ball team have arranged for a number of "meets" in various adjoining States; and others, including some of the faculty, recently took parts in the comic opera, Robinson Crusoe, Jr., which was a decided success.

As usual, the wedding bells have again been ringing, this time one of the fair students having captured (or is it the He that captured Her?) one of the professors. But probably the most encouraging part of the circular is that telling of the number of late students who have secured good jobs as soon as they had graduated; some as assistants and others in studios of their own, and all doing well.

## Trade Notes.

### WHAT IS GOING ON IN ROCHESTER, N. Y., THE CAMERA AND OPTICAL CENTER OF THE WORLD.

It has been the custom for the manufacturers of cameras to discard each year certain models and replace them with others. For this reason dealers are wary of adding to their stock at this time of the year and their customers also delay making purchases. Our representative has just made a round of the factories to get advance information and the report from every manufacturer is that their 1907 catalogues will list all their 1906 models without change and that there will be but few additions. We may expect a film camera which can be focused on the ground glass and a new focal plane shutter camera, otherwise existing models are so perfect that there is little room for improvements.

---

#### THE FOLMER AND SCHWING COMPANY

are still in the lead in the manufacture of special apparatus and goods of superior quality. They have just introduced a special camera and swinging stand that is an ideal outfit for microscopic work or for copying. The camera can be easily clamped at any angle and the focusing is accomplished by a worm thread that holds the back of the camera perfectly rigid and permits of the most critical focusing. When the focus is obtained, no jarring or shaking of the camera can alter the focus as much as the 1000th part of an inch. This outfit so appeals to scientific workers that they are already overwhelmed with orders. The Graphic compact folding cameras will also be continued and the various members of the Graflex family, with the addition of a new baby. Mr. Folmer also threatens to introduce in the near future another new piece of apparatus which will embody his ideas as to how a studio camera should be constructed.

---

#### THE CENTURY CAMERA CO.

The Century models of perfection in hand cameras will be practically the same for this year. There will be a few improvements and a new thing or two but no advance information could be obtained. The Century studio outfit is meeting with such success that no change is contemplated in that line.

---

#### THE SENECA CAMERA MFG. CO

The keenest competition has not prevented this concern from doubling their output in 1906 over that of previous years. The same series will be catalogued for 1907, also something new. The quality of the goods manufactured by this concern has steadily improved and several new patented devices have been added to their cameras without increasing the price. Their courteous, prompt, and business-like methods have made them a potent factor in the camera field and each customer an advertisement.

---

#### WOLLENSAK OPTICAL CO.

Wollensak shutters have long been a standard article and by all accounts Wollensak lenses will soon be equally popular. When the Wollensak Company absorbed the Rochester Lens Co. a little over a year ago they were cautious about their entry into the lens field. Only after their series of lenses had been subjected to the most exacting tests were they placed upon the market. The reports of purchasers have been so encouraging that the factory facilities have been greatly enlarged and their Royal Anastigmats, Series A portrait and

Royal Portrait Lenses have jumped into popular favor. While the secretary of the company rightly ascribes this success to the merits of the goods themselves, we know for a fact that it is largely augmented by their excellent business methods. "Once a customer, always a friend" is their motto, and as a consequence each owner of a Royal lens is a walking advertisement. The Wollensak Company guarantee every article they manufacture to be satisfactory or will cheerfully refund the money. Such tactics are especially valuable in the lens business, as a lens that would be just right for one person may not fulfill the requirements of another. Just as long as they adhere to their present liberal method of treating their customers will their business continue to prosper.

---

#### *THE GUNDLACH-MANHATTAN OPTICAL CO.*

This concern reports an increase of sales in Korona cameras and Turner-Reich lenses. From personal experience and the testimony of many of our readers we know that for perfection of construction and efficiency the aforementioned combination is hard to beat. The regular Korona models will be maintained in 1907 and any new improvements will not affect the price.

---

#### *THE ROCHESTER OPTICAL AND CAMERA CO.*

The full line of Premo cameras are booked for another year's run. The Premo View Camera, which was introduced in 1906 has proved to be a leader. For all-around work we do not know of any camera which will give such satisfaction and the number of sales prove that it has won on its merits. This concern will bring out several new pieces of apparatus this year but details are withheld until the publication of their catalogue early in March.

---

#### *THE EASTMAN KODAK CO.*

Continuous additions to the plant at Kodak Park and to the downtown business offices are sufficient evidence that increased demand for the products of this concern require more room. In the new offices on State Street a new feature is a free school for instruction in all the branches of photographic work. This is equipped with every modern facility and under the charge of the ablest experts in the profession. It is primarily intended for the instruction of dealers and their assistants (and, by the way, we know of no more needful pupils). When all of those who can be persuaded to do so have taken advantage of the opportunity, the school will be open to any one, professional or amateur, who desires to receive expert tuition. There is no charge made for instruction or the materials consumed and the only expense is the board and lodging; which item, in Rochester, is extremely reasonable.

---

#### *BAUSCH AND LOMB OPTICAL CO.*

While the Bausch & Lomb Optical Company claim that they manufacture more lenses than all the other lens manufacturers in the country put together it must not be supposed that these are all camera lenses. Of course these are made, from the single lens in the smallest fixed focus camera up to the massive portrait Unar which costs hundreds of dollars in the larger sizes; but there are departments for microscopes, telescopes, mutoscopes and every other special mathematical and scientific instrument which requires specially ground lenses. Although the output is gigantic, no order is considered too small to receive prompt attention.

---

#### *THE DEFENDER PHOTO SUPPLY CO.*

It will be good news to many of our old readers to learn that the Defender Company have acquired the plate manufacturing plant and formulae of the late John Carbutt. They have also secured the services of John Carbutt, Jr., who of late years was the active head

of the Carbutt factory. We may therefore look forward to a fresh supply of our old favorite brands of plates on the market and also the Carbutt lantern slide plates. Occasionally it is possible to pick up a dozen or two of these plates in out-of-the-way stores and they are still fresh and good although the factory has been shut down for a couple of years. The Defender Company have also enlarged their paper coating plant to cope with the increased orders for their developing papers.

---

## Society News.

### THE AMERICAN LANTERN SLIDE INTERCHANGE.

On December 6, 1906 the board of managers of the Interchange held their annual meeting, through the courtesy of the Camera Club, at the rooms of the Club, No. 5 West 31st Street, in this city, for the testing of several sets of slides contributed by Interchange Clubs in accordance with a call for slides made by the General Manager some two or three months previously. There was present the full board, W. R. Terhune, of the Orange Camera Club, Orange, N. J.; John P. Zenner, of the Buffalo, N. Y. Club; H. F. Smith, of the Syracuse, N. Y. Club; O. C. Reiter, President of the Pittsburg, Pa. Photo-Section of the Pittsburg Academy of Science and Art and F. C. Beach, representing the Camera Club of New York City.

Slides numbering 1472 contributed by fifteen clubs or societies were tested in this lantern between six o'clock and midnight, each slide being voted upon as it was presented. The result of the examination was most gratifying, because of the larger percentage of accepted slides as compared with former years. Six clubs each had one hundred or more approved slides. The total number approved was 1045, sufficient to make ten new sets for the season.

The Portland, Maine, Club, having omitted to contribute slides for the past two years sent a selected set of fifty slides all of such excellent quality that the board accepted the set as a whole. A set of one hundred slides by the Orange Camera Club was also accepted as a whole. Other clubs showing high percentages were the Buffalo Camera Club with 120 slides out of 125; Bisbee, Arizona Club, 105 out of 117; Pittsburg Academy of Science and Art Photo Section, 105 out of 125, and a new club, The Kodak Camera Club of Rochester, N. Y., 110 out of 125; the Toronto (Canada) Camera Club, 94 out of 110.

The active clubs in the Interchange for the season of 1907 are the New Britain (Conn.) Camera Club; Portland (Me.) Camera Club; Newark (N. J.) Camera Club; Orange Camera Club, Trenton (N. J.) Photographic Society; Columbia Photographic Society of Philadelphia, Pa.; Baltimore Photographic Club; Syracuse (N. Y.) Camera Club; Kodak Camera Club of Rochester, N. Y.; Buffalo (New York) Camera Club; Toronto (Canada) Camera Club; Chicago Camera Club; Bisbee (Arizona) Camera Club; California Camera Club; Camera Club of New York. Other participating organizations are the Photographic Society of Philadelphia; the Bethlehem (Pa.) Photographic Society and the Camera Club of the Denver (Colorado) Athletic Club.

During the month of October, 1906, the General Manager sent a selected set of one hundred American slides to the Amsterdam (Holland) Amateur Photographic Society. It is expected a special set of foreign slides will be sent this season in exchange for circulation among the American clubs.

Photographic organizations desirous of acquiring membership in the Interchange should address the General Manager, Mr. F. C. Beach, 361 Broadway, N. Y., who will supply additional information.

## CALIFORNIA CAMERA CLUB.

The California Camera Club: This organization, for so many years the Pacific Coast representative of the American Lantern Slide Interchange, was badly crippled by the earthquake and fire in San Francisco in April last. An appeal was made to the General Manager of the Interchange for assistance and considerable was done to start the club over again. The idea was carried out of having subscriptions taken up at the different clubs where the 1906 California Club set of slides was exhibited which resulted favorably to the extent of about two hundred dollars or more. Of this the Newark and Essex Camera Clubs raised over \$100 at a special entertainment. The other clubs contributing were Columbia Photographic Society of Philadelphia, Buffalo Camera Club, Camera Club of New York, The American Lantern Slide Interchange, The Photographic Section of the Pittsburg (Pa.) Academy of Science and Art and the Chicago Camera Club.

The officers of the club were obliged to spend some time in locating new quarters and finally ventured to rent a residence building in Steiner Street, No. 2206, near Sacramento Street, San Francisco, and fitted it up with work rooms so that it is expected some of the lost ground will be made good. The club has begun giving its monthly public lantern entertainments with audiences of eight hundred or more showing there is no lack of interest in the club. The Interchange sets of slides are regularly shown. The latest communication from the Club is a letter dated December 11, 1906, from the Secretary, Mr. H. G. Aylsworth to Mr. F. C. Beach, General Manager of the American Lantern Slide Interchange. He says: "On behalf of the California Camera Club, the Board of Directors desire me to again extend to you our sincere thanks for the valuable services you have rendered us, interesting the Eastern firms and photographic organizations in our welfare. We are getting our new rooms in fairly good shape, and hope soon to have them thoroughly equipped with conveniences for our members use."

The work of this club in promoting interest in photography on the Pacific Coast for several years past has been of much value. It is now in a position to continue its influence in the new city that is to spring up from the ruins of the old. May it have success is the wish of all fellow clubs.

---

## Answers to Correspondents.

---

Questions for answer should be sent to F. R. FRAPRIE, 6 Beacon Street, Boston, Mass., or to any of the editors whose addresses are given elsewhere. When a personal reply is desired a stamped, self-addressed envelope must be enclosed.

### *Squeegeeing Prints.*

W. A. SPRINGER complains that his prints refuse to part company with the ferrotype plate. Of course they will if the prints have not been alumed or treated with a hardener and if the ferrotype or glass plate is not properly cleaned. Clean the ferrotype plate with warm water each time it is used. Polish with a soft cloth until plate is absolutely free from dirt or specks of any description. Swab with a tuft of soft cloth or cotton batting wet with a solution composed of benzine 1 oz., paraffine 10 gr. Rub dry with a clean cloth and polish with a chamois skin or very soft cloth. Use a soft brush to remove particles of dust. Then squeegee the wet print on to the plate and rub down with a dry blotter. The print must be in perfect contact to produce a uniform and even surface. This can be obtained by placing a piece of cotton or rubber cloth over the print and using a small print roller to rub down.

### *Water for Solutions.*

M. BOWMAN.—It is not compulsory to use distilled water. Boiled water, however, should be used, as the oxygen is thereby liberated from the water and the solutions will keep fresh longer.

*Photo Mountants.*

SARAH HARDIE.—Both the commercial mountants are, we believe, made of white dextrine; their keeping quality being secured by the addition of an antiseptic. You are mistaken in saying that they are costly, as with the amount of work you do a ten cent pot should last you six months.

*Relative Qualities of Lenses.*

J. DE BAUM.—Under the circumstances the only advantage of an anastigmat over the rectilinear is that it works at a larger aperture, in other words, it is faster, probably as four to one. The rounder field of the rectilinear is for some purposes a real advantage.

*Stick To One Until It Is Mastered.*

HARRY WOODWARD.—We cannot in this page recommend the plates of any maker, but may assure you that there is not a bad plate in the American market. They differ, and may require different treatment to secure the best results, and therefore our advice is to select a plate and stick to it till you have thoroughly understood it. There is no best developer, and for you the best will be the one you have longest used. We may say, however, that the most general favorite seems to be the mixture of metol and hydrochinon. We rarely add bromide to our developer unless in the development of gaslight paper.

*Obtaining a Patent.*

SAM HARDY.—We do not quite understand your description of the machine and cannot say whether it is patentable. Write again and make it as plain as you can, but in any case we advise you to employ an agent, as you cannot safely write the proper specification. Of course you know that already there are several patented developing apparatuses, so that unless yours is either simpler or in some respect better than they it would not be worth the cost of a patent.

*Papier Mineral.*

W. R. IRVING.—*Papier Mineral* is a thin translucent paper frequently applied to the back of the negative for the purpose of working on it with the pencil. It should be got from any of the dealers and is not expensive. Tissue paper is not so suitable, it is more fragile and so mottled as to print through sometimes.

*Bad Selection.*

ALICE MORGAN.—That the fence was there is no excuse for the absurd photograph but a good reason why you should not have wasted a plate on it. The fence was not erected after you selected the subject. There is no necessity for an amateur, working to please himself, exposing a plate on a subject which does not please him.

*Making the Best of a Flat Negative.*

JAMES ALLAN desires to know if anything can be done with a negative that has been developed with too weak a developer, and the development prolonged until the plate is fogged, but the image shows all the required detail.

This sounds as if you had been applying rational treatment to a case of under-exposure. We would not advise reducing to clear away the fog as the weak image would also be reduced and intensification would not help the negative. The easiest and safest solution of the matter is to select a contrast giving paper for printing, such as carbon velox or the carbon grade of any developing paper. These papers are made in a variety of grades to suit all kinds of negatives and if your negative has detail but lacks contrast, the carbon grade would yield a good print.

(Rev.) W. L. HINTON.—It is contrary to rule to give the addresses of correspondents. Send under cover to us and we shall forward.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co., (Incorporated), 361 Broadway,  
New York.

Address all remittances and business communications to the publishers.  
The contents of this magazine are protected by copyright and all rights reserved.

---

## EDITORIAL STAFF:

DR. JOHN NICOL, TIoga CENTRE, N. Y.

F. C. BEACH, 361 BROADWAY, NEW YORK CITY.

F. R. FRAPRIE, 6 BEACON STREET, BOSTON, MASS.

J. P. CHALMERS, 361 BROADWAY, NEW YORK CITY.

---

VOL. XIX

FEBRUARY, 1907

No. 2

---

## CONTENTS.

Coloring Photographs—JAMES C. SAVERY . . . . .	83
Genre Pictures—MISS BERTHA PARTRIDGE . . . . .	90
How to Make a Platinum Paper for Water Development—A. J. JARMAN . . . . .	96
Critical Focusing . . . . .	99
Screened Plates for "Process" . . . . .	101
Plane Development—E. J. WALL . . . . .	103
Soft Bromide Prints from Hard Negatives . . . . .	104
Rendering of Color Contrasts . . . . .	105
Doing Things in the Dark Room—C. H. CLAUDY . . . . .	107
The Two Annuals: A Comparison—REV. JOHN DAVIS . . . . .	110
How to Copyright a Photograph—F. R. FRAPRIE . . . . .	111
Concerning the "Glycerine Process" . . . . .	113
Printing in Clouds on Bromide Paper . . . . .	115
Automatic Development . . . . .	116
Words from the Watch-Tower—The Watchman . . . . .	118
Editorial Notes . . . . .	121
Our Prize Competitions . . . . .	122
Our Portfolio—Picture Criticism—Our Table—Society News—Query Department . . . . .	124-144

## ILLUSTRATIONS.

"A Cottage Interior," James Thomson—"The Hatter," M. A. Yauch— "The Window Seat," W. H. Zerbe—"Writing on the Window Pane," Thos. Elsum—"Supper Time," C. F. Clarke—"Pearl at the Well," John F. Jones—"An Unexpected Shower," Hattie D. Lee—"Soap Bubbles," J. H. Field—"The Simple Life," Geo. B. Ritter . . . . .	81-97
---	-------





A COTTAGE INTERIOR

JAMES THOMSON

First Prize, Monthly Competition.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Edited by Dr. JOHN NICOL, F. C. BEACH, F. R. FRAPRIE, J. P. CHALMERS.  
Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

Original manuscript solicited and paid for on publication. New ideas, practical hints and reports of club meetings desired. Matter intended for publication in any number should reach us not later than the 15th of the previous month.

---

Copyrighted, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (All rights reserved.)

---

VOL. XIX

FEBRUARY, 1907

No. 2

---

## THE ART OF COLORING PHOTOGRAPHS.

JAMES C. SAVERY.

### Part One:—TRANSPARENT WASH-PAINTING.

There is perhaps nothing that appeals more to the majority of picture lovers than a well colored photographic print: on the other hand there is nothing that so offends one's artistic sense like the many daubs exhibited on every side. And to be able to tint pictures oneself is a pleasure of the picture making process that few realize. There is a certain mysterious fascination that accompanies the wielding of the brush! What colors! what manifold effects are in your power to produce!—but why go on; you will find all this out for yourself, if you only try.

Now it is my purpose in the following article to show how extremely simple the coloring process can be made if a person will only use his eyes, hands and a sufficient quantity of good judgment and patience. The necessary materials are not many or expensive, the skill required not great, and you will be surprised at the little time and practice that will enable you to produce excellent results. The "transparent wash" is the simplest process known (any one can do it if they exercise the requirements I have heretofore mentioned) and the one most employed for this very reason.

Coloring photographs with ordinary water-colors will be treated under a separate article for those who already understand the rudiments of painting.

It is to the absolute novice, the "green colorist," if you will pardon the expression, that this article is intended. Now for a few words in regard to the

## NECESSARY MATERIALS.

The first thing to procure is the colors. A great number are now upon the market prepared especially for amateur use and which can be procured at most any photographic supply house. These colors come in liquid or solid form, but personally I prefer using colors in small pans or tubes to those in liquid, the main advantage being that you cannot spill them. A fancy waist-coat and valuable table scarf, each with a clinging spot of "Sky Blue" prompt me to offer words of warning against liquid colors. A very satisfactory box of eight colors together with rules concerning mixing to produce other shades and a slip telling about the harmony of colors, can be purchased for the small sum of twenty-five cents. From this price they range upwards to two dollars.

As to brushes, a No. 1 and No. 2 camels' hair will be all that is necessary.

A piece of plate glass (a ferrotype plate will answer the purpose), two or three clean blotters, four ordinary butter saucers for mixing colors in, will complete the equipment.

Having selected a spacious table in some well lighted portion of the room place the piece of glass or ferrotype directly in front of you. On one side have your squeegee roller, blotters and a soft rag, reserving the other side for a glass of plain water, brushes, box of colors and small plates. Now comes the

## SELECTION AND PREPARATION OF THE PRINT.

While it is true that collodion or gelatin papers, such as Solio and others, may be colored by first applying a "medium" (usually a liquid to provide a tooth for the color), still the beginner will find it much more satisfactory to confine his first experiments to papers that will not require any previous "doctoring" such as any of the brands of developing (gaslight) papers. A grade of these known as "Velvet" is particularly well adapted for coloring. Platinum prints are also easily colored.

For example we will say that the print you have selected is a well printed and developed Velox print, untrimmed for the reason that this operation is left until the last, the subject being a landscape with plenty of sky and nice detail in the foreground. Right here let me say that very artistic results can be obtained by coloring photographs that have been printed through silk bolting cloth, the effect being a fine mesh like appearance that resembles paintings on canvas.

The print is now immersed in a basin of cold water (if the water is tepid it is liable to cause the sensitized portion to separate from the paper) for a few moments until it is quite flexible, after which it is carefully picked up by the corners and placed face up on the glass. Using the blotters and squeegee roller you can easily remove all superfluous moisture. In this state not only will the print lie perfectly flat enabling you to work to better advantage but further-



THE HATTER

Second Prize, Monthly Competition.

M. A. YAUCH

more the wet surface takes the color more uniformly than a dry one. After this operation you now turn your attention to what is known as

#### THE COLOR SCHEME.

This sounds perplexing to the uninitiated, but in reality it is very simple, if one will exercise good judgement.

Before attempting to mix colors, you must of course determine what colors are demanded by the picture before you. A little memorandum as to the colors that you intend using for each object in the picture, will prove helpful to the beginner in working.

Let me caution you *not to take too much for granted* when it comes to the point of deciding what colors you intend using. Many beginners make the mistake of coloring objects *in the color they think they should be* without stopping to think whether or not such a condition actually exists. Because you see a lot of trees, hills and grass, do not think that all of them must necessarily be colored in brilliant green.

Study Nature for your correct color tones and see how nearly you can reproduce them in your picture. Compare the color of a certain object, such as a tree, with that of a like object some distance away and you will be surprised to note how the color has been changed by the introduction of that medium artists term "atmosphere."

The first and most important thing that demands your attention in coloring a landscape is the colors you intend using for the sky. The beginner's first impulse is to put down merely the word "blue" opposite to that of sky, upon his memorandum. If we observe Nature we find the sky to be a series of tints, with blue the most predominant. Compare the color of that portion directly above the horizon with the center of the heavens and note the difference for yourself.

Therefore for the sky you will need three tints, which for example will be pale pink, light blue and blue. With a few exceptions this combination is always good. The accompanying diagram will serve to illustrate the comparative area for each color. Now that you have the color scheme well in mind, (or on paper) the next thing is the

#### MIXING AND APPLYING OF COLORS.

If the sky is the first portion to be colored then you must of course prepare its tints, namely pale pink, light blue and blue. Coloring the sky first enables you to get these colors more even than if you attempted to put the sky in afterward behind the colored foliage, etc.

Pour about a teaspoonfull of clear water into each of the three dishes and with your largest brush mix a *weak* solution of the three colors. A few trials will convince you of the exact strength. The light blue is obtained by merely diluting the blue.



THE WINDOW SEAT

W. H. ZERBE

Honorable Mention, Monthly Competition.

Let me caution you again about not mixing the colors too strong. *Never* under any circumstances use the colors in their *full* strength as in the end you will have nothing to show for your time but a hopeless splotch.

You are now ready to begin work on the wet print before you. Starting with that portion marked in the illustration as CD and with your brush well charged with the pink solution carefully work in the desired space. Let the colored solution stand for a few seconds and then blot up the remaining solution. The operation of coloring the entire picture will consist of applying these different washes and successively blotting them.

In like manner as the first apply the other two colors, (their respective areas being BC and AB) blending each color with the brush slightly dampened



COLOR SCHEME FOR LANDSCAPE

with plain water. In working over large areas, such as a sky for example, your largest brush will prove the most satisfactory.

Once the colors are applied and "set" they will not wash off and you may have no fear in plunging glass and print into a basin of water and squeezing as before in the event the print shows a tendency to dry and curl at the corners.

After coloring the sky, clean dishes must of course be prepared before attempting

#### THE FOREGROUND AND PICTURE PROPER.

Having selected the colors that you are to use for this, you will now proceed in the same manner to make thin washes of each. The broad effect such

as trees and roads are first worked in with their respective colors. The first wash is for the high lights and after this a trifle stronger solution of the same color to be applied to the shadows. It is best to proceed from top to bottom, coloring those things nearest the horizon first.

I might say here that there is nothing that so spoils the artistic excellence of a picture as one color overlapping another, such as an aureole of green appearing on the sky that surrounds trees, etc. therefore be extremely careful in this respect.

Thus having completed the main portion of the picture the next question is the treatment of

#### DETAIL.

If your picture calls for "detail" be sure to give it your best time and patience. I cannot emphasize too strongly the necessity of giving attention to those little things in a picture that are at first sight lost if they are not clearly defined.

Even to the coloring of the smallest buttercup by the wayside, to that of a distant housetop, do not become careless, for in the end you will find that it is these little things that show you have been careful and give your work distinction from the commonplace.

#### MOUNTING.

After having completed to your own satisfaction the print before you, it may be dried by merely setting the glass in a cool place free from dust.

The print can be trimmed and mounted in the usual way on a good quality of Melton Board harmonizing in shade to the predominant tones of your picture. If desired it can then be framed in passe-partout and prove an adornment to any room.

I sincerely hope that the foregoing paragraphs will prove helpful in opening the way to this simple but fascinating branch of picture making, the charm of which increases as one becomes more deeply absorbed.

---

#### HINTS TO PLATINUM PRINTERS.

If the developer is too cold, *i. e.*, below 60 degrees, a hard black and white print will be produced, lacking in half tones.

When prints appear fogged all over and look very muddy, old paper is indicated or damp paper at time of printing.

Negatives deficient in contrast can be printed through blue glass. This improves the contrast in the platinum print.

If the acid is not thoroughly washed out of the prints after fixation, the paper will become rotten in the course of a few days.



## GENRE PICTURES.

MISS BERTHA PARTRIDGE.



HE amateur photographer is usually satisfied for a time with good snapshots of "places I have seen and people I have met" but the time comes when these become unsatisfactory and a few portraits indoors are attempted perhaps, with more or less pleasing results and the camera is often laid aside because of lack of interest or non-success. If the photographer would turn his attention to the attractive but usually neglected branch of photography known as "genre" work, he will find a use for his camera again. The man who has a definite plan in mind and carries it out, has the satisfaction of conquering difficulties and accomplishing something, and "genre" work is fascinating but not always easy. The pic-

tures that "tell a story" are always appreciated by friends and the photograph most admired when your collection is shown is not your choice landscape study but a picture perhaps of the children fishing or the old farmer using his scythe.

With children there are unlimited opportunities for such pictures and the true child lover can get almost any result aimed for after he has won the confidence of the children by kindly patience and sincere affection. The photographer should keep his plan in mind in dealing with the little folks, but often something more desirable may be obtained if the photographer is ready to grasp each opportunity and take a picture when he can.

An artificial, posed look will spoil the picture; so aim to have the children entirely at ease and when the children are large enough to understand, it is a good plan to explain about the camera and take them into your confidence in regard to your plans.

It is best to take such pictures of children at their home since the natural diffidence and curiosity of childhood makes it more difficult, elsewhere. Be sure that no relatives are present to direct and annoy the children and do not allow them to be "dressed up" for natural and pleasing positions are not easily secured then.

Sometimes one can secure snap shots of children playing, that are pleasing. A "Little Girl's Day" makes a picture story showing the little maids' amusements and occupations. "Rocking dolly to sleep"; "Washing for dolly"; "Setting the table"; "Sewing"; ending with "Good night"; showing the little maid in nightgown with her candle ready for slumber land. Three attractive pictures by a professional photographer show a two year old boy in an arm chair, "Wide Awake"; "Sleepy"; "Fast Asleep". Other suggestive titles are



WRITING ON THE WINDOW PANE

THOS. ELSUM

Honorable Mention, Monthly Competition.



SUPPER TIME

C. F. CLARK

Honorable Mention, Monthly Competition.

"Fishing"; "Afternoon tea"; "Learning to Sew". The country school offers opportunities also for the photographer. Old people make good subjects for genre work and like children they usually have time to pose for the photographer. "Reading"; "Mending"; "Telling Stories"; and other occupations will suggest themselves.

For the photographer who spends his summer in the country the different work in the fields could be pictured from spring until autumn, ploughing, planting, hoeing, reaping and gathering into barns. One photographer at the seashore took several pictures to illustrate an "Old Fisherman's Work," showing him at home mending his nets, ready to start, pulling out in his boat and returning home with his fish. A little tact is necessary in securing subjects, for many people have the idea that it is necessary to be "dressed up" and wear a stiff white collar if one is to have a picture taken. Show a few pictures of the *genre* variety and explain your wishes and you can usually get the hearty co-operation of your friends.

A photographic amusement, not exacting in the *genre* line is the illustration of songs or poems. One amateur took several pictures to illustrate the song, "In the Shade of the Old Apple Tree" and later illustrated the poem, "The Barefoot Boy"; mounting the pictures in albums and writing the lines below.



PEARL AT THE WELL

JOHN F. JONES

Honorable Mention, Monthly Competition.



AN UNEXPECTED SHOWER

HATTIE D. LEE

Honorable Mention, Monthly Competition.

In taking the *genre* class of pictures a rapid lens is often essential to success and a certain amount of diffusion of focus adds to the charm for many people, giving atmosphere; but the "fuzzy" picture that is indistinct and shadowy will not please the person who is not educated up to artistic standards.

Let each one decide for himself, whether he will follow the path of the modern pictorial photographer with "broad" treatment and diffusion of focus or the methods of the "Straight" photographer. Pictures of the vague and shadowy class receive many prizes in competitions and exhibitions and the judges, who are often artists, can grasp the beauties and see the charm of pictures that the average person cannot appreciate. It is a good plan to study the work of another that is called artistic but never follow blindly in his footsteps, but go on your own way and do not lose your individuality.

Composition, lines and harmony may be studied to advantage.

Persistent effort and constant study will give you skillfulness in the use of your tools and real knowledge and enjoyment becomes possible.

---

**A NEW FIXING SALT.**—The Lumieres have introduced a new fixing salt, a mixture of hypo and a chromic salt, which is said to so harden the film of both plates and paper as to admit of being washed in warm water and drying by heat. This will be a boon to many, especially to workers for the press where prints are frequently wanted within a few minutes after exposure.



SOAP BUBBLES

Honorable Mention, Monthly Competition.

J. H. FIELD



THE SIMPLE LIFE

GEO. B. RITTER

## HOW TO MAKE A PLATINUM PAPER FOR WATER DEVELOPMENT.

A. J. JARMAN.

To develop an image in platinum upon paper without the employment of a special developer, is a great advantage to many persons who have to travel, and have to make this class of picture hurriedly. The simple plan of only having to dip a print into warm water and watch the development appeals to many.

In preparing paper of this kind, one of the salts used may be difficult to obtain, namely ferric oxalate. It is procurable generally of the manufacturing chemist at about 25 cents per ounce in the dried state, or an acid solution at 75 cents per pound. It will be advisable to purchase the acid solution, which should test upon the hydrometer to 65 or 70. Either strength will answer, and as this article will deal with the preparation of water developed platinum paper it will be necessary to provide a few chemicals and utensils for the purpose. Obtain, in the first place, say two or three dozen sheets of plain paper of the variety known as B. F. K. Rives No. 74, or some of Steinbach's heavier rough surface paper. The sheets will be about 18 by 22 inches and cost about 50 cents a dozen. Procure about half a dozen wide mouth amber-colored glass bottles, fitted with new corks, and make up and obtain the following:

- (1) Gum arabic (white), 1 ounce. Dissolved in hot water, 3 ounces.

(2) Chloroplatinite of potassium,  $\frac{1}{2}$  ounce. Dissolved in hot water, 6 ounces.

(3) Oxalic acid (C. P.) a saturated solution in hot water.

(4) Oxalate of potash, a saturated solution.

(5) Potassium chlorate, 60 grains. Dissolved in hot water, 5 ounces.

(6) Nitrate of Lead (C. P.), dissolved in hot water, 4 ounces. 60 grs. to 1 oz.

Lactic acid, 4 ounces.

Chlorate of iron (Ferric chlorate),  $2\frac{1}{2}$  ounces.

To make up the ferric chlorate for the proportion of this paper, mix in a separate bottle of amber color two ounces of the ferric oxalate solution, and four drachms of potassium chlorate solution by measure. The special function of this preparation is to give the necessary contrast to the developed image.

A drying box or closet will be required, a spare cupboard, a clothes closet will answer; some pieces of copper wire must be stretched from side to side to suspend the paper by for drying, a gas stove must be placed upon the floor, upon a ferrotype plate, as this will reflect no actinic light, and placed upon the stove may be a piece of sheet iron about six inches square; this is to distribute the heat. A thermometer should be placed in this closet, and the temperature so regulated that it does not exceed 140 F. The sheets of paper may now be prepared for coating; the exact size must be determined beforehand. Three dozen shellac varnished wood clips will be required, and two dozen wood strips about half an inch wide and an eighth of an inch thick, also shellac varnished; the above number are required for one dozen sheets of paper. If the sheets of paper are cut in halves, then the wood strips will have to be nine inches long. This size paper is a very good one to practice upon.

Having the material and closet in readiness, the sensitizing solution must be made up as follows by mixing all the ingredients in one bottle.

#### SENSITIZER.

Ferric oxalate solution (fluid measure) . . . .	4 ounces.
Ferric chlorate . . . . .	3 drachms.
Chloro-platinite of potassium solution . . . .	3 ounces.
Nitrate of Lead solution . . . . .	3 drachms.
Potassium oxalate solution . . . . .	4 drachms.
Oxalic acid solution . . . . .	2 drachms.
Lactic acid . . . . .	10 drops.
Gum arabic solution . . . . .	1 drachm.

An ordinary amber-colored wine bottle will answer the purpose well to make this mixture in, as it can be easily corked and shaken well, after which it must be filtered through absorbent cotton, lightly pressed into the neck of a



clean glass funnel, into a sixteen or twenty ounce wide mouth amber-colored bottle under an orange-colored light.

#### COATING THE PAPER.

Pour the above mixture in a clean amber-colored glass 8x10 tray, having the sheets of paper marked so as to distinguish the face from the back, and a strip of varnished wood, clipped at the top and bottom of each sheet at the back. Lift up the sheet, bend it like the letter J. Allow it to touch the liquid at the lower end, raise this end which is held by the left hand, allowing the right hand to lower at the same rate, so as to pass the surface of the paper twice over the sensitizer, then drain the excess of liquid from one corner back into the tray without forming air bubbles; now place the sheet in the hot closet to dry, by suspending it upon one of the stretched copper wires by the hooks attached to the clips; treat all the other sheets of paper in the same way, and place them in the closet until quite dry. The above method of coating is the nearest to machine coating that it is possible to carry out; the surface of the paper does not become rubbed, as it would be with a brush.

As soon as the paper has become dry, all the sheets must be placed aside away from any trace of actinic light, to become cold, then coated again; only in this case, the paper must be reversed, so that in hanging the bottom becomes the top; this is to cause an even coating to each sheet.

As soon as the paper is dry after the second coating, it must be removed from the closet, and cut to the sizes required, and packed away in paraffined or waxed paper, under pressure, so as to protect it as much from the air as possible. In fact, it is best to place the package of cut paper in an ordinary tin tube with a good fitting lid, and a small piece of calcium chloride well wrapped in a piece of linen rag and tied up, to prevent its contact with the paper; the balance of the liquid may be returned to the bottle for future use, but it will be found best to use up the sensitizer as it is made, preparing only just enough for the amount of paper to be coated.

#### PRINTING.

This paper is printed in just the same way as platinum paper of the usual kind. As soon as the image is fairly visible and the high lights show faint detail, that is sufficient. It will be advisable in the beginning to make a trial or two upon a few small pieces of paper, and when printed, place one of the pieces of paper in a tray of fairly warm water; when the image will develop up at once to almost full intensity. As soon as development is complete, the print must be placed in a tray of acid water, made up of hydrochloric acid, half an ounce, water, thirty ounces, and allowed to remain in this for ten minutes. The prints, if there are quite a number of them, will require three such baths, and then to be well washed for half an hour in running water.

The color of these prints will be of a very rich black, and possess all the qualities of permanence of the usual platinotype.

Another way to develop these prints is to hold them in the steam issuing from a tea kettle; by this means some parts of the print can be developed to a greater extent so as to give control, and local treatment, and thus secure just the effect desired.

If the prints made upon this paper are allowed to stand in a damp closet for a night, it will be found the next day that they have become fully developed, and have only to be placed in the acid solution to give them permanency—of course with a good washing after the acid baths. This paper will print much better after it has been kept for a short time, and if it has not been sufficiently protected from damp, the image will print out quite plainly, so that the right depth may be seen before development takes place.

The use of a piece of *plain* iron plate upon the gas stove has its purpose; if galvanized sheet iron is used for this purpose there will be a considerable number of spots all over the paper, due to the volatilizing of some of the zinc, and the formation also of zinc oxide; a few strips of heavy blotting paper or board should be so placed to take up any of the drops of sensitizing solution that may fall to the floor. A print 8x10 sent with this article made in 1898 upon paper made as here described will show the permanency and other good qualities, a picture of the Maine before leaving for Havana from a negative by F. Muller of Brooklyn.

---

### CRITICAL FOCUSING.

The focusing screens generally supplied with the best cameras are quite serviceable for the more ordinary purposes, including the photography of architectural subjects, but fail altogether when really critical definition is required. They fail because they are not flat, and also, because the grain, as a rule, is not fine enough. A home-made screen will be found better, and can be prepared without the exercise of much skill, by getting two pieces of polished patent plate glass of suitable thickness and the required size, and grinding one side of each together until they present, when washed and wiped, an evenly grayed surface. The grinding is done by putting one piece of glass down on a flat board with small brads to prevent it slipping about, but not projecting so high as the upper face of the glass, and working the other glass with a circular motion on it, with fine emery and water between. The emery should be the finest that will cut, obtained by elutriation. The finer the grain of the screen the less bright is the image that falls on it, but the finer the detail, therefore such a screen as described might not be so good for portraiture and views as one with a coarser grain.

A writer in *Knowledge* says: For really critical focusing the surface of the screen must be polished so that the image may not be broken up at all. It is often stated that in such a case a high-power eye-piece must be used, that the accommo-

dation of the eye may not introduce uncertainty. This is an error, for no practical eye-piece could prevent a normal eye from accommodating or focusing itself so as to clearly see the image as it was moved over a considerable distance. There must be marks on the screen surface, and these marks must be seen in sharp focus at the same time as the image; then the marks and the image will be in the same plane irrespective of the power of the eye-piece and the accomodating power of the eye. A common suggestion for getting a clear spot on a ground glass screen, is to cement a microscope cover glass to it with Canada balsam. If this is done a few lead pencil marks should be made first to focus the eye-piece on. I have tried this method a few times, but never succeeded. Of course, the glass and balsam that the light passes through when focusing, but not when exposing the plate, will cause the image plane to be different in the two cases, and whether or not this is the reason, the fact remains that I have not found this method reliable. If a clear or nearly clear spot is wanted on a ground glass screen, the method that is the most successful with me is to rub the part with grease until the desired effect is produced.

If the whole screen is to be polished, then a selected piece of patent plate is employed without grinding it, and it remains to get the lines on its surface. It will be found advantageous if these lines are ruled in groups of three, with a greater space between each group and the next than between the members of the group. No method of hand ruling with a diamond has been successful with me, the lines are broken and irregular, but perfect results may be obtained by etching. For this purpose, the selected piece of glass is thoroughly cleaned and dried, then warmed so that when rubbed with a piece of wax, the wax melts and coats the glass. When cold, the film of wax should be complete and thin. To make the lines, which, of course, must go quite through the wax, a needle is not so good as a sharp knife, and this should be drawn along against a straight-edge, exactly as if cutting, but with a light pressure, only just sufficient to go through the wax. For the etching, a piece of thin sheet-lead is bent up at its edges with the fingers, to form a shallow tray. This should be placed out of doors on something level and firm, enough strong sulphuric acid put in it to form a shallow layer, and powdered fluorspar scattered evenly on it. Hydrofluoric acid is soon evolved, and the glass, with its waxed side downward is placed over it, resting on the edges of the dish. In a short time, a minute or two, perhaps, the etching will be sufficient. The glass is warmed, the melted wax wiped off, the glass well cleaned, and the lines examined with an eye-piece. The best amount of etching should be determined by experiment, noting how long the glass remains on the lead dish. Those not accustomed to hydrofluoric acid need warning that they should be very careful not to inhale any of the gas or to allow the mixture to come in contact with their person in any way. But with no more than ordinary care, and working out of doors as described above, there is no reason to fear trouble. The dish, after use, should be washed out with a copious supply of water before bringing it into the house.

NOV

## SCREENED PLATES FOR "PROCESS."

Mr. Thomas Bolas, in his "Weekly Review of Progress and Experiment" in *The Amateur Photographer*, has the following to say about a probable introduction of a plate already screened for process work. There seems no reason why the method should not be practical, and it would certainly be a saving of both time and cost in photographic engraving or the engraving of photographs.

Judging from a recent patent application, we may see a serious attempt to put ready screened or grained negative plates or films on the market; that is to say, plates or films upon which a screen ruling has been previously impressed so that the negative shall, immediately after development, fixation, washing, and drying, be ready for printing upon the zinc plate of the process block-maker, this plate being ordinarily coated with a sensitive stratum composed of fish-glue and an alkaline bichromate.

Plates already impressed with a screen image, or, as an alternative, with a random grain image, were on the market in 1885 and 1886 and 1887, these having been manufactured by Messrs. Brunner and Co., of Winterthur, Switzerland, and I can personally testify to the excellence of the results obtainable with the plates in question, and, in addition, the published results were so good as to abundantly prove that faultless screen effects may be obtainable by using plates upon which the screen effect is already impressed. Nevertheless, although technically good, the plates in question appear to have been put on the market before their time.

Before touching on the advantages and disadvantages of making the grained or lined negative at first hand, it may be well to indicate one way of preparing the sensitive surface which shall, in itself, include the means for producing the screen effect in the resulting negative; and for inspiration in this direction, reference may be made to the English specification of Kunkler and Brunner, a specification dated January 29, 1884, but so badly worded or so badly translated as to be scarcely intelligible. The essence of the matter is to produce a gradated or grained deposit of silver haloid in the sensitive film, whether the medium is gelatine or collodion. The sensitive plate having been exposed, under a ruled or grained screen, or to a camera image of a ruled or grained screen, is developed and fixed, after which the screen image is re-converted into silver haloid by bromine water, a mixture of bichromate of potassium, sulphuric acid and bromide of potassium, or in any other suitable manner. If now washed and dried, the plates will be ready for use. This method, I may remark, appears rather better suited to the treatment of collodion emulsion plates than to the treatment of gelatine emulsion plates, but perhaps the best possible result might be obtainable with a composite gelatine-collodion plate of the kind suggested by Vogel some twenty years ago. If the screen-effect

plates were manufactured on a well organized system, the cost should not be more than one and a-half times the price of ordinary plates.

To the photographer who works for the general press, and contemplates reproduction in several papers of a widely different character, one disadvantage of ready-grained plates would be the fact that there would be no power of selecting such various finenesses of ruling as to suit each individual paper; but the photographer going out on a mission for one particular paper might find it a great advantage to take ready-grained plates or films. Another disadvantage of the ready-grained negative plate is the difficulty, or impracticability, of retouching without destroying the screen effect. The every-day process worker has accustomed himself to look upon a positive print as his original, the print being easily sent by post; and, moreover, a print will often be sent without hesitation when the photographer would rather pause before sending the negative. On this print the process department works with remarkable freedom, both with black and white, thus frequently obtaining something presentable from a very poor original. The film negative with screen effect could be sent by post easily enough, but the difficulty of retouching would seem to stand in the way of anything like, or comparable to, the ordinary system of working up. Of course, if the original screen effect of a grained negative did not suit, or if the subject had been considerably retouched, a new screen effect could be superimposed; but all process workers will recognise the difficulty of superimposing one screen effect on another without producing interference bands or markings.

A grained negative obtained directly in the camera must be reversed if the ordinary fish-glue process is to be employed, and this involves some special appliance or precaution, as a prism in front of the lens, unless, indeed, such thin films are used that the negative can be printed from the back.

It is worth remembering that the grained negative as produced either by the process worker's camera, or as it would be obtained at first hand by a field worker, using such plates as those introduced about twenty years ago by Messrs. Brunner, is not so pronouncedly sharp in its grain as is the process reproduction, hence screened negatives may be as good as, or in some cases superior to, ordinary negatives for general purposes, so that whatever may be the ultimate outcome of the screened plate question for the newspaper photographer, the matter may interest the amateur who seeks special effects, and may like occasionally to try his hand at block making.

---

To remove yellow stain on negatives, caused by prolonged pyro development, or lack of sulphite in developer:

Alum .....	2 ounces
Citric acid .....	1 ounce
Water .....	10 ounces

Soak the plate in water for a half hour, then immerse in this solution until the yellow color is abstracted.

## PLANE DEVELOPMENT.

E. J. WALL.

"There is nothing new under the sun" may be said of nine out of every ten so-called discoveries or inventions connected with photography, especially by those of us who have lived through its earlier days. The latest example of old things becoming new is the "plane development" of the following article, discovered by Herr Rudolf Walter, of Kiel, and told of by E. J. Wall in *The Photographic News*.

Lying before us while we write is a price-list of plates and instructions for their development, probably the very first attempt at making a commercial gelatino-bromide plate, and considerably before the introduction of Kennet's "pellicle." Here, after instructing as to development in the ordinary way, the author winds up by saying that "in the development of subjects having great contrast the lights are apt to be much over developed by accumulative action resulting in a degree of contrast hardness that makes the negatives unfit for printing. To prevent this the developing solution should be diluted with once or twice its bulk of water, the plate laid in a flat tray and just a little more than covered with the weak solution, and allowed to lie without rocking or motion of any kind, "till development is completed."

No doubt many readers will wonder what particular method of development is that to which I have given the above title. I can think of no better term, unless we adopt the term "level," which might be considered the translation of the German word *planliege*, and is that adopted by the proposer, Herr Rudolf Walter, of Kiel, of this particular method of development.

The author explains the reason for his process by the following theoretical considerations: on exposure of a plate the latent image is formed, which consists of sub-bromide of silver. In development this sub-bromide is reduced to metallic silver and bromine is set free, and the latter combines with the alkali of the developer to form alkaline bromide. In the ordinary process of development this bromide is distributed throughout the developer by the rocking of the dish. Now it is an established fact that bromide tends to prevent the reduction of the sub-bromide to metallic silver, therefore, in the ordinary method of development the whole of the developer contains increasing quantities of bromide, which acts on the shadows as well as the high lights.

Stand development is open to the same objections as the alkaline bromide falls towards the bottom of the developing tank, and also partially diffuses throughout the developer.

Now what we want particularly in snapshot work is to obtain sufficient detail in the shadows without excessive density in the high lights. Again, in such cases as a brilliantly-lighted window in an otherwise dark interior, normal development is apt to give us very bare shadows, and in some cases, halation round the windows. If now we could restrain the development in the well-exposed parts and apply at the same time a developer without bromide to the less exposed parts, we ought to be able to secure better results. This then, according to Herr Walter, is exactly what his method of development results in.

The whole secret of the process is in exactly levelling the plate and using a weak developer.

The method of working is as follows: a box with a light-tight cover must be obtained, and the inside should be painted black. In this should be placed the dish, and the whole carefully levelled with a levelling stand. Then the plate can be placed in the dish, the developer applied, and the cover put on. After about half-an-hour the plate may be looked at, but great care must be taken not to shake the dish or otherwise agitate the developer. Fixation is effected as usual.

Provided the dish be large enough, it is obvious that several plates can be thus treated at once, and the developer being a very weak one the process is practically stand development on the flat or plane. The developer recommended by Herr Walter is von Hübl's glycin paste diluted with 40 parts of water, which let me add, is an excellent one for stand or ordinary work.

Dr. Neuhauss, the editor of the *Photographische Rundschau*, in which the article appears, states that the author has submitted to him "a large number of negatives, some of which were developed by the old and others by the new method. Most of them were extremely difficult subjects, as, for instance, directly against a bright window. The results by plane development are in all cases simply startling; negatives, which by the old method were absolutely unusable, were by plane development of wonderful delicacy. We can only urgently impress upon our readers to experiment with this new method.

There is one caution which may not be out of place here, and that is levelling the dish will not necessarily make the plate level, particularly if the bottom of the dish is not flat.

---

### SOFT BROMIDE PRINTS FROM HARD NEGATIVES.

The following method from *The Barnet Photographic Record* is worth making a note of, as by it, excellent prints may be made from negatives that, printed in the ordinary way, would be valueless.

The paper is exposed behind the negative in the usual way for such a time that the high lights, when the print is duly developed, have the appearance they should have. If the negative is too strong, the shadows will then be hopelessly black and blocked up. Instead of, therefore, placing the exposed paper in water, preparatory to developing, it is put in a dilute solution of potassium bichromate; a strength of one half per cent. (24 grains of the salt to 10 ounces of water) is that most generally useful. The length of time the print is allowed to soak in this solution must depend upon the extent of the hardness to be overcome. Probably one minute will suffice. The print is then rinsed in three or four changes of water, and developed in the usual way and with the usual developer. It will be found that the time taken to develop has been increased to about double, but that otherwise the action goes on as if no bichromate had been used, save for one thing. The high lights are in no perceptible degree interfered with, but the shadows, instead of closing up to a black mass, will be found to retain a great deal of gradation; in fact, it would be difficult to decide that the print had not been made from a negative exactly suited for the process.

Even a weaker solution than that which we have just given will be found to have a marked effect upon the print, while if the bichromate is too strong, it may restrain the development of the shadows to such an extent as to spoil the print. The great things about the process are that it in no way injures the color or tone of the print, and calls for no change either in the time of the exposure or in the composition of the developer. If there is a stain at all caused by the bichromate, it is a very slight one, and disappears entirely in the after processes. It is a curious thing that the bichromate should affect the parts that have had the greatest exposure and leave the high lights alone, as it were, since the prevailing impression for a long time has been that the action of a bichromate solution on an emulsion was to clear away slight fog. In fact, in the old days it was recommended for the purpose. On the other hand, it must not be supposed that a solution such as this can be used indiscriminately. It is, and must always be, far better to have a negative suitable for the particular process that is to be used; but if on an exceptional occasion it appears desirable to get a bromide print from a negative that is too harsh for the regular method, then this plan might well be tried.

### THE RENDERING OF COLOR CONTRASTS.

*(Being a portion of a paper read before the London and Provincial Photographic Association by C. E. Kenneth Mees, B.Sc.)*

Although, as we have already said in this issue, the number of workers in color photography or even in orthochromatic rendering is small indeed, they are increasing and will increase, and therefore we gladly reproduce the following from *The Photographic Monthly*, as it seems to give a control over color luminosity greater than ever before.

It is frequently remarked, sometimes as an objection to orthochromatic photography, that since it is not possible to render the effect of color contrast into monochrome with accuracy, better results may frequently be obtained by avoiding any attempt to correct to true luminosity values.

For example, if we have green and red patches of the same luminosity value in juxtaposition, then, although neither of them will appear brighter than the other, yet they will appear to be very different to the eye. But if they are photographed with a plate and screen which render luminosity values correctly, then they will appear of a uniform tint, and the bright visual contrast will be lost. The usual way of avoiding this difficulty, for it cannot be said to be surmounted, is to use a screen which does not give full correction, and which, for instance, renders the green as lighter than the red.

The chief objection to this course arises from the fact that if complete correction is not obtained, it is very desirable to know to what extent the cor-



rection is incomplete, and it is almost impossible to ascertain this in the manner indicated.

A plan which may or may not be original, but to which I can find no reference, has been designed. If a set of three-color filters be mounted on a slide-past holder fitting in front of the lens, then the plate can be exposed through one, two, or three filters successively so as to make up the total exposure by exposure to different portions of the spectrum. With a "Wratten Panchromatic" plate and "Wratten" tri-color filters, complete correction was obtained by an exposure of two-thirds to the green filter and one-third to the red filter. No exposure to the blue filter is required, as the green records quite enough blue.

It will be noted that orthochromatic rendering will not be obtained by giving the ratio of exposures required for three-color photography, because this gives isochromatic rendering in which all colors of equal saturation are rendered as of equal intensity and not of the intensities which the distribution of luminosity in the spectrum shows them to require.

Now, having the ratio for correct rendering, we can accentuate any color at the expense of others to any extent required. Two thirds to the red and one third to the green, for instance, gives exalted reds and degraded greens; one half to the red and one half to the blue, exalted reds and blues and very degraded greens. The whole exposure to the green filter gives much the effect of the ordinary green and yellow sensitive plate fully corrected, but renders reds as blacks.

And in this way error can be introduced in order to facilitate the rendering of color-contrast, with the constant knowledge as to the deviation from the truth and the consequent error produced.

#### GROUND GLASS SUBSTITUTE.

Gum sandarac .....	18 grains
Gum mastic .....	4 grains

Dissolve in  $3\frac{1}{2}$  drams of ether; then add 1 2-3 drams of benzole.

If too transparent, add more benzole, but not enough to precipitate the gums. Flow ordinary clear glass with this solution, let dry, and you have a perfect ground glass substitute.

#### MOUNTING PRINTS ON GLASS.

To mount prints in optical contact with glass: Soak 1 ounce of sheet gelatine in cold water until it will absorb no more, then dissolve it in  $3\frac{1}{2}$  ounces of boiling water. Let the solution cool to about 110 degrees; then immerse the print in it, and squeegee *face down* to a clean piece of glass. When dry, take a damp cloth or sponge, and wipe off any surplus gelatine that is adhering to the glass.

#### TO REMOVE PYRO STAINS FROM THE FINGERS.

Wash in a strong solution of chloride of lime; then in a dilute solution of citric acid.

Avoid these stains by keeping the hands wet while developing. Rinse them often and the pyro will not stain them.

## DOING THINGS IN THE DARK ROOM.

C. H. CLAUDY.

"Dark Room," as used in the above title, is to be taken to mean the home of your photographic orgies, whether they take place in the dark or in the daylight. There is hardly any act in daily life, let alone the photographic part of it, which cannot be done both a right and a wrong way. I might mention the perversity of collars in fitting on collar buttons, when stiff, and the ease with which the ordinarily cussable process is accomplished if the buttonhole is moistened, as an example of the first. And there are a whole host of little points like that in photographic work which the amateur has to learn for himself, and which he sometimes doesn't learn for a long time, greatly to his regret when he is finally instructed.

## WEIGHING CHEMICALS.

Take, for instance, the common process of weighing any chemical. Your scales, perhaps, weigh up to two ounces. You have a formula which calls for ten grains of this, thirty of that and an ounce of something else. Now scales which weigh up to two ounces—such scales, at least, which are sold to photographers for dollars two or three, are not made for weighing half grains with any degree of accuracy. Consequently, in weighing out the ounce called for the chances are many to one in favor of your scales giving you an ounce and ten grains, or an ounce less ten grains, although this excess may seem large. But try it. Measure an ounce on your scales as light as you can and still have the pans balance. Have ten grains weighed out—on another scale if necessary—and add gently to the material now weighing an ounce. If your scale tips so the pan goes down, it is an unusually good scale. The chances are the points will simply vibrate a little and come to rest.

Now, an error of ten grains either way in weighing an ounce is a total possible error of twenty grains, or about four per cent. And if you are apt to make a four per cent. error in weighing one part of your formula, what is the use of being more exact than four per cent. in the rest of it? Bearing this point in mind, delicate weighing of tiny fractions of a grain of chemicals in a formula in which an error is to be made becomes needless. But it is wise to make your errors all on one side—either have your weight full—seeing the pointer rests beyond center, or scant, having it beyond center on the weight side.

## MAKING SOLUTIONS.

I suppose all of us have declaimed an American declaration of independence and other Fourth of July remarks about chemicals which refuse to dissolve in quantity. Some of the sodas have a pleasant habit of caking in the bottom of a bottle in which they are put for stock solution, the same cake being almost impossible of dislodgement. The best plan is to avoid the cake, of course. One way to do this is to have a small mortar and pestle—wedgewood—and of either eight or sixteen ounces capacity. Take small quantities of your weighed out chemical and triturate vigorously with enough water to make a syrup. Pour this syrup into your bottle, with more water, and solution takes place quickly. Another, easier, but longer process, is to suspend your chemical in a muslin or double cheese-cloth bag in a wide mouth bottle or jar, tying the

chemical in with a string and hanging it just inside the container by the same means. Have the water surround the bag and the chemical will dissolve and ooze away in a time remarkably short compared to the time it would take if simply put in the bottle and left to its own devices.

If your chemicals *should* cake in bottles, with solution above them, the cake can be best removed—I am supposing you wish to preserve it and the container—by boiling said container in a water bath. Cork it at your peril, however! The best way is to set the bottle, with its refractory cake and solution, in a pan on two pieces of wood. Surround the bottle with water to a height equal to the solution inside, and heat slowly until boiling. This treatment, if given time enough, will fetch almost any cake to a solution.

#### FILTERING SOLUTIONS.

There are some baths which require either to be filtered or to be decanted. A combination toning bath for solio, for instance, or the hypo alum toning bath for bromide paper. Now filtration is a slow, tedious process, with plenty of accidents possible, in the way of bursting filter papers to undo the process just as it is well done. Hence decanting is the popular form of freeing a solution from its precipitate. But not one in ten decants properly. To try to pour off the clear liquid in the easy language of the instruction books, is to save about half of it, and then, probably, to get some of the precipitate along with it. The proper way to do the job is to use a syphon, and the proper syphon to use is the key to the matter. Most syphons are makeshifts—a bit of rubber tubing, or any glass tube handy bent to a U. But the point to notice is, in these, or one made for the purpose, the diameter of the tube. A large tube, say half an inch, syphons so quickly that there is no time to comfortably graduate the end of the syphon with reference to its position above the precipitate—besides which, a large syphon is hard to start. The proper syphon is one made of a glass tube an eighth of an inch inside diameter or less—bent to a U with one leg longer than the other. Fill this with water by laying flat in a dish. Put your finger over the end of the long leg and insert the other leg into the bottle, an inch below the surface. Remove your finger and the syphon will start. As the level of the solution in the bottle decreases, lower the syphon, and when near the precipitate, say half an inch from it, stop your downward movement. The syphon will stop of itself when the level of the liquid, being decanted, reaches the end of the leg in the bottle. In this way almost all of a liquid can be decanted without disturbing the precipitate and without hurrying so that the process is spoiled through haste.

#### MEASURING BY "PARTS."

It seems to me, and I have no doubt it does to many who will read this, that instructions as to the meaning of certain words used in writing formulas are superfluous at this time, when the explanations have been made so many times before. But your editor can tell you that he has been asked these same questions since the beginning of time, and that he expects to go on answering them until the end of it. So many join the ranks every year, and some, who have learned, forget. Hence I hope to escape without the necessity for an apology if I explain once more what "a part" is.

Take of water, ten parts; of sodium sulphite, two parts; of hydrochinon, so many parts, etc. "What is a part!" I suppose has been written in the photographic editor's brain in letters of fire, and yet a part is nothing more nor less

than—a part! And may be grains, ounces, pounds or tons; it may be inches, feet or miles; minims, pints or barrels. A “part” is some division of the whole, no matter what, so all other “parts” in the formula under consideration are the same. Formulas are so given that any quantity can be made to suit the individual. You may make your solution up in gallons, using immense quantities, while I may only want enough for a few operations. So the formula man says “parts,” and we select the measure which pleases us best. Read “ounces” or “pounds” or any other measure for “Part,” when you come across it in a formula, but if you start with ounces keep on with ounces, a part not being changeable in the middle of the process of solution making.

#### CLEANING DISHES.

You have been impressed with the reiteration of the photographic text book, “Use hypo trays for nothing but hypo.” Yet this is a caution only and need not be a mandate to you. Any dish used for hypo can be made fit for other use, provided (1) it is not porous; (2) it is not cracked, and (3) the cleaning be thorough. Take commercial hydrochloric (muriatic) acid and make a half strength solution; that is, one “part” acid and one part water. Wash the dish with this thoroughly and then, rinsing, scrub it with sand soap. Repeat this operation two or three times and you can be sure the dish is clean. Hydrochloric acid destroys hypo and renders it harmless to other photographic chemicals, and the sand soap removes the particles. If the dish be cracked, however, be wary. Cracks hold chemicals and frequently produce stains, in such operations as toning prints in the cracked tray.

While on the subject of cleaning, let me say that I believe there is a great deal of valuable time wasted in cleaning bottles. If the common acids, such as sulphuric, hydrochloric and nitric won’t budge the sediment, and shaking with shot or sand has no effect, throw the bottle away. Few bottles are worth the trouble spent on them, and a new bottle costs so little to get that it is odd people will spend so much worry and time over an old one.

#### HOME-MADE CONTAINERS.

There is a great convenience in the dark room waiting on any one’s time and pleasure, and very seldom seen. I refer to a large container of any kind with a tap at the bottom. A household filter of this type costs several dollars. A home-made one costs as many cents.

At first sight the boring of a hole through a bottle seems a formidable task, but it isn’t. Go to the hardware store and get a couple of round files—“rat tail” they are called, one a little larger than the other. Break off the end of the smaller near the tip. This provides you with a sharp, cutting edge of hard steel. With this cutting edge worry the glass where you want the hole until you have made a little mark. Now put the edge of the broken file on this mark and turn. Bore into the glass as you would into wood with an awl, being carefully conscious all the time that you are working in glass, and so must not press too hard. In a few minutes the hole will be nearly through the glass. Here is where the care comes in. Work completely though very slowly and cautiously, for if the bottle is to crack at all it will do so now. Work the file through gently and then, by a back and forth motion the hole can be made round and smooth. The larger file can now be brought into use and the hole made big enough to take a small rubber cork. This cork should have a hole through it, and a two-

inch length of glass tube through the hole. On the outer end should be a two-inch length of rubber tube, and another two-inch length of glass tube. A stop valve to be bought at the chemists for a few cents squeezes the rubber tube and prevents any liquid in the bottle from coming out. These containers are excellent for stock soda solutions, stock hypo, in fact most anything which has to be made in bulk and used frequently.

---

## TWO ANNUALS; A COMPARISON AND A CONTRAST.

REV. JOHN DAVIS.

The *American Annual of Photography* and the English *Photograms of the Year* have now been before the photographic public sufficiently long for a critical judgment to be passed upon them. The size is practically the same, large octavo, though the American work contains 322 pages, while the English rounds out but 164. In an appendix to the former are found formulae for all the plates and papers in common use, with tables of symbols, atomic weights and measures, and a variety of helps and conveniences to the amateur. Prefixed to the volume is an almanac, with other useful data.

The purpose of the two works is somewhat distinct. *Photograms of the Year* reproduces typical pictures of the year which are criticised by a competent judge, together with monographs by specialists on the several national schools of photographic art. The *American Annual*, apart from its pictorial pages, is devoted to articles by representative workers, intended as aids to beginners or even more advanced amateurs. Seven contributors make up the menu of *Photograms*; forty-two find their place in the American volume.

Pictorially the palm must go to the English annual. There are some excellent specimens to be met with in the American collection, but the variety and technical execution of the English and Continental workers is relatively higher. The number of prints appearing in *Photograms* is considerably more; being 150, as against 110 in the *American Annual*. The superiority of the British school is most manifest in the landscape prints. There is an "atmosphere" about them which is indescribable; a charm doubtless peculiar to the climate of the British Isles, easily placing this country foremost in landscape photography.

In literary quality the laurels unhesitatingly go to the English Annual. Its articles lift the reader to a high plane of intellectuality. The opening sketch "Pictorial Photography in America for the Past Year" is one that would be difficult to excel as a graceful, incisive critique. In these two or three graphic pages Mr. Rood reflects credit on American authorship as well as art criticism. The "Year's Photography in Spain" by M. Leon is another fine example of critical judgment, calculated to surprise the average reader at the splendid progress in photographic art in that too little known country. "Artistic Progress in France" by M. Demachy is all too brief, but is luminous and discriminating, as we should expect from such a source. A. C. R. Carter reviews the work of the two great English Exhibitions, the "Salon" and the "Royal," the first of which is eminently satisfactory, but in the second the limitations of time or space cause him to skimp his work, and the finale is altogether disappointing. The other articles, which we have not space to more than indicate, are also tuned to a high key, so that we lay down "Photograms" with the feeling that we have been in the best of company, intellectually as well as artistically.

Turning to the *American Annual*, we wish it were possible to say as much for its literary form. It must be contrasted, not compared, with its British rival. The mass of the contributions is superficial and unsatisfactory in treatment. Quantity, not quality, seems to have been the ideal of the editor. The three descriptive articles on New Orleans, San Francisco and Canada are very readable and well illustrated. The monograph on the "Nude in Art" is judicial and temperate, disclosing some interesting facts in connection with this curious class of portraiture. "Apertures" is helpful, while "Snow and Ice Crystal Photography" opens up a fascinating if difficult line of work. "Outdoor Photographic Work for Winter Months" also contains some useful hints for beginners.

But turn to the other side. And where will you find more vacuity on a single page than in the paper entitled "By the Canal?" Unless it be the employed one devoted to "The Kids and the Graflex." Take the "Carbon Process," how much help will come to the beginner from this article? The amateur is not seeking for platitudes extolling this process; what he wishes is, not *why* carbon prints are made, but *how*. Nor does Mr. Oliver in his "Pepper Sauce" improve the present status through his tirade against the several methods of factorial development. The best of professionals as well as amateurs are using these methods to-day. Thus we might continue our review, with the verdict that the literary flavor of the *American Annual* is distinctively commonplace.

Happily the artistic side is higher. Whether we turn to the prints or the printing, little remains to be desired. We are close on the heels of our British cousins in pictorial art; let us lessen the distance in literary form. Moreover, we have the writers. They should be secured long in advance, definite subjects assigned them by the editor, with a suggestion to send in something informing as well as discursive or amusing. Reduce the number by one-half, or even two-thirds, thereby giving them sufficient space to tell a helpful story. We regret to say that the majority of the articles in the *American Annual* for 1907 are not very luminous to the advanced worker; they are not much more useful to the beginner.

---

## HOW TO COPYRIGHT A PHOTOGRAPH.

FRANK R. FRAPRIE.

Every photographer is likely at any time to produce a negative, which may be of such news or artistic value that it is desirable to protect it by copyright. Though the formalities for this are simple, few photographers are familiar with them, and I will briefly state them, for the benefit of all our readers as well as of several subscribers who have recently asked the question.

The copyright statutes enumerate the classes of articles which are subjects of copyright protection, and no article can be copyrighted unless it is possible to designate it as belonging to one or the other of the articles or classes of articles named in the law. Among these are both photographs and photographic negatives. A photographic print, in order to be entitled to protection under the copyright law, must be printed from a negative made within the limits of the United States, or from transfers made therefrom.

The formalities required by law in order to secure copyright entry are very simple. No statement is necessary except the direct application for

copyright registration. No papers are required to be sworn to, nor any certificate to be furnished.

The law prescribes three simple steps as preliminary to copyright protection. Each of these steps should be taken exactly as the law requires; otherwise no protection is secured. These three steps are:

Step A. REGISTRATION of title or description in the Copyright Office of the Library of Congress. This step can be taken before prints are made from the negative if desired.

Step B. DEPOSIT OF TWO COPIES of the photograph not later than the day of publication in this or any foreign country. The copyright law explicitly enacts that "In the case of a book, photograph, chromo, or lithograph, the two copies of the same required to be delivered or deposited as above shall be printed from type set within the limits of the United States, or from plates made therefrom, or from negatives, or drawings on stone made within the limits of the United States, or from transfers made therefrom."

The photograph should be marked with the name and address of the sender, should be addressed to the Register of Copyrights, Washington, D. C., and should be deposited in the mails before any copies have been distributed to the public, with postage fully prepaid. The law requires postmasters to give receipts for titles and copies on request.

Steps A and B are prerequisites to any copyright protection. They may be taken at the same time, if desired, but not later than the day of publication. If taken together, all matter relating thereto, including title, photographs, application and fee, should be sent in one parcel.

Step C. NOTICE OF COPYRIGHT should be printed on every copy distributed, in one or the other of the following forms: "Entered according to act of Congress, in the year \_\_\_\_\_, by A. B., in the office of the Librarian of Congress, at Washington;" or, "Copyright, 19—, by A. B."

In the case of a photograph, this notice should be placed upon some visible portion of the article or of the substance on which the article is mounted.

No copyright can be defended against infringement unless the notice of copyright is given as above directed. The notice should not vary from the form prescribed. The date given in the notice should be the same as the year date of the entry obtained by taking "Step A" above described.

To secure registration of a copyright of a photograph therefore, the following steps are necessary.

Obtain from the Register of Copyrights, Washington, D. C., or from the postmaster in any large city, a copy of Form A. This will be sent free on request. Fill out blanks.

Attach to the application, a *printed or typewritten* title of the photograph. *Written titles are not legal, and can not be accepted.*

Forward to the Library of Congress, Copyright Office, Washington, D. C., the application, with a money order or express order for the exact amount of the fee, payable to the Register of Copyrights. Postage stamps should not be sent in payment of copyright fees. Postage stamps of larger denomination than five cents can not be used at all, and if sent to the Copyright Office they will be returned to the sender.

Send *two* copies of the photograph not later than the day of publication, before any other copies have been distributed.

Send application, title and fee in one parcel. If the two copies of the photograph are sent under separate cover, mark the parcel plainly with your

name and address. In the case of photographs, the title should be plainly written or printed upon the copies so that the connection between the copies and the entry may be easily made.

The Copyright fees prescribed by law are as follows:

**ENTRIES AND CERTIFICATES.** For recording each title of a book or other article, the production of a citizen or resident of the United States, the charge is fifty (50) cents. If a Certificate of copyright (i. e., a certificate of the entry of the title) is desired, there is an additional charge of fifty (50) cents, or \$1.00 in all. One certificate can be made to include only one title.

For recording each title of a book or other work, the production of a person *not* a citizen or resident of the United States, the charge is \$1.00. This fee of \$1.00 is required to be paid for recording the title of every work whose original author or producer is "a person not a citizen or resident of the United States," whether the proprietor of the copyright is or is not a citizen or resident of the United States. A Certificate of such record requires the payment of fifty (50) cents additional, or \$1.50 in all.

**COPIES OF RECORD.** For every copy under seal of the record of entry of title, the charge is fifty (50) cents.

**ASSIGNMENTS.** For recording and certifying an instrument of writing for the Assignment of a copyright, the charge is \$1.00; and for each copy of an Assignment \$1.00.

**RECEIPTS FOR TWO COPIES.** For a certified receipt for the deposit of two copies, the charge is fifty (50) cents.

In no case should any postage stamps or stamped envelopes be sent for reply, as all Copyright Office mail is forwarded under a Government frank.

All remittances should be made by money-order, payable to the Register of Copyrights.

Remittances for copyright fees should always accompany the letter of application, and not be sent in separate envelope. The preferable way is to send the application for copyright registration, the title to be recorded, and the money order for fee, in one parcel; and if the two copies required to be deposited to complete copyright cannot be conveniently inclosed in the same package, it is an advantage to have them forwarded in the same mail or on the same day.

The only fee necessary in ordinary cases is that of 50 cents for each title recorded. A notification will be sent without charge and a certificate of copyright is not necessary except in case of litigation.

---

### CONCERNING THE GLYCERINE PROCESS.

The "glycerine process," as may not be known to some of our readers, is the term applied to a tentative method of developing the platinotype print which permits of control or modifications according to the skill and taste of the worker. We are indebted to *Down Town Topics* for the following details from the pen of Joseph T. Keiley, the original elaborator of the process:—

Let me preface my remarks by saying that while the process itself is one of the simplest, its satisfactory application is one of the most difficult of those now in use in the photographic world. Its technique is peculiarly its own. It involves a knowledge of color values and their rendering or translation into equivalent



blacks, grays and whites that is both exact and sympathetic. In working the glycerine process it should first of all be remembered that glycerine acts as a restraining element. Mixed with the developing solution it makes possible the control of the action of the developer. To reduce such control to practical use, it is necessary to be able to apply locally and in such strength as is desired and also to be able to remove at will all trace of the developer from the print. For this purpose I introduced the use of brushes and blotters. The glycerine outfit should consist of a set of brushes, a broad, soft brush with which to apply pure glycerine, a brush not necessarily so broad with which to brush the developer over the print; smaller brushes for local application, and a very fine brush for special touching-in of developer where necessary. There should be jars for the developer and glycerine—at least three—one for the pure glycerine, one for the normal strength developing solution, one for the mixed solution of developer and glycerine.

There should also be at hand a piece of heavy glass (10 x 12 or 11 x 14 is a good size) on which to place the print for development, and clean blotters prepared for photographic use, cut to the size of the print. I have for general purposes found two solutions all that are required—one of the full strength standard developer, the other of one part glycerine and two parts full strength standard developer carefully stirred together with a clean glass stirring rod. These solutions are placed in shallow, wide-mouthed glass jars close at hand and pure glycerine placed in a third jar. Three trays containing the standard clearing solution are also placed within reach. The print having been made, the back thereof is coated by brush with glycerine to make it adhere to the glass upon which it is placed back down and brushed over its face with glycerine in thin coating. The mixed solution is then applied with one of the other brushes, and the parts of the print developed at will. If development threatens to get away from the worker, immediately the face of the print should be thoroughly blotted off with a piece of clean blotter and then recoated with a thin coating of glycerine laid on more generously where sufficient development has taken place. Such parts as are fully developed should afterwards be let alone. Where special strength is required in the print the straight full strength standard developer should be carefully applied with another brush, carrying only enough to moisten but not to flow. Except where burnt in by solarization, such parts of the print as are not subjected to the action of the developer are soluble in the clearing solution and show only the white of the paper when removed from the clearing solution. It is thus possible to eliminate from the print intruding objects having nothing to do with its main subject that had intruded upon the field of the camera's vision. It will be readily understood from what has been said that with such a process it is possible to print further than for ordinary immersion development—to print for the sky in a negative, for example. Care should be taken to have a good platinum paper to work with in the first instance and not to detach parts of the surface thereof by working it too vigorously with the brushes. The development finished, the print should be cleared in the customary way and carefully washed. In the process of washing, the print should not be permitted to remain longer than necessary in the water, as the fibre of the paper is often pulped thereby in places, and, detaching itself, spoils the print. Beyond this, little else can be said for the instruction of the workers, but I venture this suggestion: let the novice at the process select some negative that is a favorite with him, some subject

with whose moods and character, in line, tone, &c., he is thoroughly familiar and in sympathy, and let him then experiment upon a number of prints therefrom, printing them to different depths and developing varyingly, so that one brings out one feature of negative, one, another, that each may be, as it were, a distinct and different interpretation with variations of the original theme; and then compare results. In this manner some of the possibilities of this process under skillful manipulation will be readily realized.

It is almost superfluous to remark that the sheet of glass on which the prints are developed should always be kept thoroughly clean.

---

## PRINTING IN CLOUDS ON BROMIDE PAPER.

WILLIAM GILL.

Almost every worker has his own particular method of printing in clouds on bromide paper. The following is that which I have adopted as being the easiest or at least that with which absolute coincidence of cloud and landscape can be most easily obtained, and in which there is most perfect control over the development of the cloud. It is applicable both for enlarging and contact printing, but is much easier for the latter.

By far the most satisfactory method of putting clouds in enlargements is to make transparencies from the landscape and cloud negative, the latter on a celluloid film and bind into contact. It is thus possible to remove any cloud form from projecting parts of the landscape, either by hypo and ferrocyanide or actual cutting away of the celluloid. There is no chance of the junction-line showing, and the use of celluloid films enables one to adjust the cloud negative to the lighting of the landscape merely by inversion.

The necessary materials for putting clouds into contact bromide prints beyond the ordinary things that every worker has in his dark room are a sheet of celluloid, such as is used for rollable films, about half an inch larger all round than the negative, and some absorbent cotton wool.

The landscape is masked, exposed and developed in the usual manner, well washed under the tap and immersed in a weak solution of citric acid, about a quarter of an ounce to the pint, which prevents any further developing action, though, of course, precisely the same result may be obtained by washing long enough. After the acid bath, the print should be rinsed, laid face up on a sheet of glass (an old negative will do), the celluloid gently squeezed into contact with it, and the surface of the celluloid dried.

The cloud negative can now be adjusted in position over the landscape and shifted about without any difficulty so as to obtain the best arrangement, and the whole is ready for the second exposure, which, as is well known, should not be so long as for the landscape, as otherwise the clouds will be too heavy. Precisely the same developer may be used for the clouds as the landscape; in fact, it is preferable to use the same, for if the developer be diluted or mixed with glycerine, as has sometimes been recommended, there may be a slight difference in the color of the image, which gives a somewhat curious effect.

To develop, the celluloid is stripped off the print, left on the glass, and supported at a convenient angle with the sky portion downwards, and the developer applied with a tuft of cotton wool well saturated. This should be

applied as rapidly as possible all over the sky, and then the progress of development carefully watched and more developer applied to any parts which lag or should be thought to be darker. The merging of the clouds into the horizon or any portion of the landscape which projects into the sky can be very easily effected by applying more or less developer.

The advantages of this method of working are that one is absolutely sure of getting the clouds in the right position, and with correct exposure and development they are sure to be correct in tonality. Development of the clouds can be immediately arrested by washing under the tap, and provided care be taken to always keep the landscape portion uppermost, there is no chance of its further development.

I have not found that there is any degradations of the high lights of the print by this method, but should this be feared it is extremely easy to make a mask of the landscape by printing on P.O.P. till the outlines are visible, then cutting out the landscape and pasting it on the glass side of the cloud negative. This prevents any chance of the second exposure affecting the already developed landscape, and the mask being on the glass prevents too sharp a line of demarcation. The use of the celluloid does not cause fuzziness or want of sharpness in the clouds, whilst if this is required—and softness of definition in this part is by no means a disadvantage—thicker celluloid may be used, when the desired result will be obtained.

This method of working may seem somewhat troublesome and tedious, but with a little practice it soon becomes very easy, and the results are so certain as to warrant its trial by everyone.—*The Photographic News*.

---

#### AUTOMATIC DEVELOPMENT.

The Editor of *The Amateur Photographer* has been writing a series of instructions for beginners, and what he has to say of "automatic development" is well worth reproduction. Before adopting what may be called mechanical development, however, it will be well to remember what has been said on another page about correct exposure and whatever method of development may be resorted to, it should never be forgotten that correct exposure is the foundation of good photography. His remarks are as follows:—

I am coming more and more to the conclusion that anyone who has never touched, seen, or heard about a photographic plate can develop one as well as you or I by simply allowing the thing to develop itself. Now I am perfectly serious in this, and it is only on rare occasions, and at times when I feel particularly clever, that I now ever attempt to develop plates by any personal activity. I let them do their developing by themselves, and they generally do it quite as well as any of us could do it for them, and often better. I dare say some of you know that the mechanical-development-so-many-ticks-of-the-clock gentlemen assure us that once the plate, or film, is exposed its fate is sealed, and all jiggering about with the developer has no effect on the ultimate result; and I am quite disposed to agree with them, hence the importance of correct exposure, and hence my urgent appeal to my readers to get this one matter right and I am sure that thereafter all things will become easy. Yet I know the novice so well that I can see just where his trouble will arise. He, or rather you (and if it is not you it is someone else), will take the exposed plate from the dark slide, place it in the dish, pour on the developer, all with trembling and anxiety; then the

plate begins to darken in parts—certain portions hurriedly get quite black and the general plan of the subject is recognized. But soon the light parts get darker, and presently the whole surface of the plate goes nearly black. But when is this plate to be removed as fully developed? That's the question which it is so difficult to answer, and that is why I suggest that if it presents a difficulty to you, you should resort to a modified form of developing, which will to a great extent cast the responsibility on the plate itself; and the course I recommend is that known as, and you have doubtless heard of it under that name, "*Stand Development*," so called because the plate or plates are allowed to "stand" in the developer for a considerable time, and "stand" in a literal sense, inasmuch as they must remain in a vertical position.

#### STAND DEVELOPMENT.

Procure a trough or tank with vertical grooves in it, or select some vessel of sufficient capacity to accommodate a draining rack which will hold the plates and be deep enough to ensure the uppermost edge being well covered by developer. Into a large jug or other vessel mix up a developer, using *ten times* the amount of water prescribed. Stir it very thoroughly, and if you have two jugs, so much the better, because then you can pour the mixture from one to the other and back again, so as to ensure a very thorough mixing. Fill up your trough, or whatever vessel you have chosen, with this ten-times diluted developer, and then plunge in the draining rack with the plates to be developed. There may be one or two, or there may be a dozen, as many as the rack will hold. Then find something which will completely cover the trough or vessel, and for safety throw a thick cloth over the whole, and go your ways, turning on the gas and opening the door, confident that development will proceed slowly and steadily, whilst you occupy yourself about something else.

After an hour shut off the light, restore the ordinary dark-room conditions, uncover the trough, and examine one of the plates to see how development has progressed.

If you feel confident that this plate is developed far enough, then compare the other plates with it, and stop-development or not, according to circumstances. But if you are uncertain, if you hesitate to trust your own judgment, then rinse it under the tap, and at once place it in a fixing bath, preferably of rather more than ordinary strength.

In five minutes the plate will be sufficiently fixed for you to be able to tell if you have a good negative or a bad one, although, to ensure complete fixation, it must be left in the fixing bath ten minutes more; but, according to whether you see you have a good negative or not, you can stop the development of the others or let them remain. The additional five minutes that they have been in the developer whilst you have been fixing the one as a test will make practically no difference, and the one plate which you fix, even if it prove to have been insufficiently fixed, will be only one bad negative, and prove the salvation of all the others.

---

#### TO PRINT FROM A CRACKED NEGATIVE.

1. Put three or four thicknesses of tissue over the frame and print in the sun.
2. Hang the frame up by a long string, and keep it twisting and untwisting. When the print is finished, no line should show where the negative was cracked.

Both of these methods refer to negatives with just the glass cracked. If the film is broken, the negative is ruined.

## WORDS FROM THE WATCH-TOWER.

## THE WATCHMAN.

History is made up of little items, and the question of Who was the first to be photographed? is of some importance. The claim has been made for several, the latest, up to quite recently, being Lord Avebury in England. In reply to that a Mr. Gardner writes to *The Westminster Gazette* as follows:

"It might (he says) interest your readers to know that my uncle, Andrew Shanks, a well-known engineer in London a generation back, was personally acquainted with M. Daguerre, and visited him in Paris about the time that he had invented his process for taking photographs. Up to that time M. Daguerre had never attempted to take portraits, but simply architectural subjects and landscapes. My uncle suggested to him that he ought also to apply it to portraiture. M. Daguerre replied that if he would sit down he would make his first experiment upon himself. This challenge my uncle accepted, and he sat for one hour in brilliant sunshine in order to have his portrait taken by the new process. This portrait is still in existence, and in possession of my mother, who had it given to her by my uncle. It is an undoubted fact, adds Mr. Gardner, that this is the first photo of a person ever taken by Daguerre under his patent process—viz., the Daguerreotype."

\* \* \*

Is our Government as obliging? Sometime ago the British Postmaster-General issued an order that from that time post-cards less than  $4 \times 2\frac{3}{4}$  would not be received; but on his attention being called to the fact that there were thousands in the hands of the trade only  $3\frac{1}{2} \times 2\frac{3}{4}$ , he replied as follows:

"In reply to your letter of the 31st of October, I am directed to state that in view of the inconvenience which might in some cases be occasioned to dealers in postcards by the immediate enforcement of the new minimum limit of size, the Postmaster-General has decided that until the end of April, 1907, cards which are not smaller than the old minimum size of  $3\frac{1}{4}$  by  $2\frac{1}{4}$  inches are to be allowed to pass without challenge, provided that in other respects they conform to the present postcard regulations."

\* \* \*

It is pretty well known that the truth is not always told in the Bankruptcy Court, so that we may not be so near seeing by wire as a certain gentleman would lead us to believe. He was being examined in bankruptcy and gave as the cause of his position that he had spent over \$20,000 in experimenting on a method of seeing by wire, but that *it was now perfected* so that what was going on in this courtroom could be seen at a distance of, say, 1,000 miles. I have read of something like this more than once, and it may come, but I fear it is not yet, as a man who had perfected such a method would not need to go into bankruptcy.

\* \* \*

I would gladly do all that I can to hold up the hands of a writer in *The Amateur Photographer* who is down on what he calls "A Growing Evil," the method so largely adopted by the sensitive paper makers of giving to their papers names that are misleading; such as carbon surface; platinum-matte, etc., etc. I do not, of course, say they mean to mislead, and no doubt if they were taken

the users of the paper and the buyers of the prints; and it would be better for all concerned if they would avoid the appearance of trying to mislead. The following is the article referred to:

"I have always emphasized that the custom of loosely naming printing papers by words derived from the characteristics of other processes is most undesirable. For instance, silver printing papers are described as having a "carbon" surface; worse still, some of them pass under the name of "Platino" matte; and I am sorry to note that a collodion silver printing paper has just been introduced under the appellation of "Platinoid." The various makers concerned are all of them far above suspicion of being wishful to mislead purchasers; but such trade descriptions do undoubtedly lend themselves to fraud on the part of unscrupulous persons, for which reason it were well if they could be replaced by others which would not leave room for doubt. How even practical photographers are, at times, innocently misled by such confusing names is illustrated by a case brought to my notice of an amateur who sent a large number of bromide prints to a photographic record society which were described by him, and accepted by the curator, as "platinotypes"! He subsequently confessed that he was under the impression that "platino-matt" bromide paper yielded an image in pure metallic platinum."

\* \* \*

"An Old Hand," writing in *The Amateur Photographer*, under the caption "A Fatal Mistake" has a paragraph that should be in the hat or on the camera of every photographer in the land. It is as follows:

"I have referred more than once lately to the immense importance of using an exposure meter; and (at the risk of seeming to be something of a monomaniac on the subject) I am going to make a few more observations on this now. My excuse must be that it is a precaution far too neglected by the tyro. You may make mistakes in developing, in fixing, in washing, in printing; and nevertheless turn out a passable photograph. But a mistake in exposure is fatal. Under-exposure, in particular, is the one unforgivable sin. Only a great deal of skill can save a moderate under-exposure; and no degree of skill whatsoever can save a serious under-exposure. Over exposure, within reason, is not quite so irremediable; but it is none the less a bad error. There is nothing so satisfactory as giving the *right* exposure: neither under nor over, but just exactly correct. Tinkering with modified developer, with intensifiers and reducers, cannot hold a candle to correctness of exposure plus plain-sailing in development, in the first instance."

\* \* \*

According to *The Chicago Record-Herald*, some enemy of the Orr-Kiefer Studio, Columbus, Ohio, has done dastardly damage to its contents. Getting into it on a Sunday night they or he, destroyed thousands of negatives, took the lens, said to have been worth \$2,000, and smashed it with a hammer, finishing up with pouring hydrochloric acid all over the place. Hanging is the least that should be awarded for such a crime.

\* \* \*

The picture postcard has had the honor of having been mentioned in the British Budget speech and no wonder. According to official report the almost fabulous number of 500,000,000 passed through the British postoffice. \$5,000,000 for the transportation of that one article is something to think about. What share of the profit of the making of them has fallen to photographers is not easy to tell. Judging from what have reached me, and I have had a very

good share, it has not been nearly as large as it might, could, would and should have been. During the year there have come to me just sixty-eight, and only three of these are photographs, one of Edinburgh Castle, a family group, and a State Normal School. The rest were all printed, mostly in colors, but none on a photographic basis.

\* \* \*

We all know that "doctors differ," and there are many subjects on which differences of opinion may legitimately be held. But there are also some on which there should be no room for difference. One of the latter is surely regarding the density of the negative in such parts as represents the fingers of the human hand. And yet a professor, or teacher of negative making in one of our most popular colleges of photography tells the readers of a contemporary that "The rule should be to develop that part of the negative that is desired to print absolutely white until an object, *as the finger*, can not be seen through it when held close to the light,—when seen by transmitted light." The italics are mine, to give emphasis to the fact that he teaches what is false. No healthy human skin is white and should never be so represented in a photograph, although, through a too long development, hundreds of photographers do so, making no difference between the face and collar of a portrait. The collar may rightly be opaque but the face or finger never, the doctor's teaching to the contrary notwithstanding.

\* \* \*

It is a crime for editors to lie by proxy? The question occurred to me on reading the following in the pages of an exchange: "Is it not common knowledge that the American photographic publications are mainly made of articles stolen from British technicals?" It is not a fact and therefore cannot be common knowledge, and the editor knows it. In plain language, it is a lie, and the question is, does the editor by admitting it into his pages homologate the lie? It is all very well to say that he does not hold himself responsible for the views of his contributors, but there are some things that he ought to know that he will be held to account for, and the lie direct is or should be one of them.

That some, or perhaps most of the American photographic magazines copy largely from the British and other journals is true, and that should be considered as a compliment by their editors so long as due credit is given, which, with possibly one or two exceptions, is always done.

---

#### HINTS TO PLATINUM WORKERS

If the paper before printing shows a number of white specks, dust from the calcium chloride used in the tube has settled on the surface. Calcium chloride used in storage tubes should not be in lumps or powder, but in the form of "asbestos compound" sold for the purpose.

If the oxalate solution turns red litmus paper blue it is unsuitable for developing, and a little oxalic acid should be added until it just turns blue litmus paper red.

Platinum prints can be distinguished from bromides or gaslight prints by applying some saturated solution of mercury bichloride. This bleaches the silver print, but does not affect the platinotype.

## Editorial Notes.

The Carnegie Institute of Pittsburg, announces that it has reorganized its plans for future work, and that photographs will no longer be considered as within its scope. Such is the gist of a brief dispatch sent out to the press of the United States a day or two ago. This means simply that, like the Philadelphia Academy of Fine Arts, disgusted by the jealousies and quarrels of photographers among themselves, the Institute has decided to ignore photography.

We do not propose here to record the steps of the dissension between the two groups which have been fiercely striving in Pittsburg, each to accomplish its own ends. But we wish to enter a most earnest protest against the infliction on the photographic world of another bitter quarrel. Such affairs do an infinite deal of harm to photography, and no good to anybody.

Whether the Salon supported by the American Federation of Photographic Societies be a satisfactory and representative national exhibition or not, it is at all events the only open exhibition in America where all the world may enter on equal terms. It affords encouragement to many earnest amateurs not yet of the first artistic rank, and has introduced some promising talent. It has won for itself a place and support.

Yet now, because of petty jealousies which are unworthy of serious comment and unintelligible to the outsider, the existence of both Salon and Federation is threatened by internal strife. The Federation had already suffered by the withdrawal of several clubs which could not afford the heavy dues, but it seems destined to a career of usefulness if its remaining members but be loyal.

The movement started by Portland, Washington or Pittsburg, it matters little which, to form a print interchange, each club contributing fifty prints annually to form a circuit, is in itself a good thing. If, however, as is freely asserted in club circles, it is intended as a rival organization to the Federation, its formation bodes no good to American photography. We have had enough of quarreling; we want no more dirty linen washed in the photographic press; let us have peace.

\* \* \*

We feel that it is our duty to our readers to apologize to them for the poor reproductions of the pictures from the Third American Salon in our January number. One of our staff made a trip to Pittsburg to select these pictures and obtain reproductions. We would have preferred to make the half-tone cuts in New York, as then they would have been up to our usual standard of excellence. As we could not take the pictures away from Pittsburg, we sought advice as to the best engraver to be had. The management of the Salon introduced us to an engraving firm in whom they had implicit confidence and to whom they had intrusted the making of the cuts for the catalogue. Assuming, therefore, that our reproductions would be satisfactory, we planned and partially printed our January number. When the cuts finally arrived, they were improperly etched, flat, and gray, although made from good originals. As the magazine had already been delayed long beyond its proper time of appearance for these cuts, there was nothing to do but to make the best of a bad situation and print them, unsatisfactory as they were. We promise that no such cuts will appear in future issues.



## OUR GENRE COMPETITION.

F. R. FRAPRIE.

The pictures sent in for this competition were of more than usual number and excellence. We are pleased to note the continual improvement from month to month in the character of the work submitted for competition. With the accession of the numerous readers of *CAMERA AND DARK ROOM* to our pages, we hope that the monthly competitions will prove more popular than ever.

Awards were made this month as follows: First Prize, James Thomson; Second Prize, M. A. Yauch; Honorable Mention, John F. Jones, C. F. Clarke, J. H. Field, W. H. Zerbe, Hattie D. Lee, Thomas Elsum, George B. Ritter.

The first prize picture is one of a series of four by the same maker. They all show in a high degree the qualities of simplicity and strength, but also some incoherencies. The most notable fault is a scattering of the high lights, which, however, is not very marked in the picture reproduced. The lights on the window casing, the hanging towel, the chair in the foreground, and the letter, all subdued in the course of reproduction, are spots which compete for attention with the figure. The great merit of the picture is the ample space which encloses the figure. One gets the impression of a large apartment, an impression skilfully conveyed, because out of accordance with the facts. At the same time no violence has been done to perspective by the employment of a lens of too short focus. The technical work of the picture is excellent, the problem of a dark interior with a view of the landscape outside a window being admirably solved.

The second prize picture, "The Hatter," is an excellently done picture of simple toil. The composition is correct, the pose is excellent, and there is almost an entire lack of distracting details. The clock on the wall is one of those accidents which even the most painstaking photographer will at times overlook. The bright reflection from its face, although it has been subdued a little, is a spot in the wrong place. Otherwise we have no criticism of details on the whole.

Of the pictures which we award honorable mention, we find it extremely difficult to say which is better or the best. All are faithful transcripts of ideas of merit, well posed so that posing is not apparent, the action being apparently caught without much self-consciousness on the part of the models, technically well done, and the result of careful thought and effort. We mention them in a chance order not necessarily indicative of our opinion of their relative merit.

"Pearl at the Well," by John F. Jones, while not at all original in idea, and taken with a lens of too short focus, as indicated by the distortion of the pail in the foreground, is a conscientious and thoroughly successful piece of work. The poses are unstudied and natural, and the action is admirable. The interest is concentrated, and there is not a line or spot in the picture which takes the attention away from the idea. Mr. Jones submits other prints of nearly equal merit, some of which may possibly be reproduced in a future number.

"Feeding Time" by C. F. Clarke is a good picture of a subject much less frequently attempted than pictures of our other domestic animals. The photographer who has stood camera in hand before a flock of hens at any time,

and waited for their nervous energy to suffer a temporary diminution, will appreciate why. So, with the difficulties of the subject in mind, every photographer will be willing to admit that Mr. Clarke's selection of the psychological instant was correct. Composition and massing are all that can be desired, and the rendition of the level afternoon light is excellent.

J. H. Field's untitled picture of children blowing bubbles, is a picture whose charm is seen at the first glance to be in its quality. An analysis, however, shows that this charm is illusive. The rendition of the whites is flagrantly inexact, and yet the impression given is correct. The device of the open door is now hackneyed, and the accentuation of the paneling on the right side is irritating, yet in spite of all, the picture is charming and gains in charm on long acquaintance.

"The Window Seat," by W. H. Zerbe, is one of the accepted pictures of the Third American Salon, and, as such, received some mention in our last number. We have little to add to that criticism, except to call attention to the excellent modeling of the face seen against the light, which is one of the principal charms of the picture.

"An Unexpected Shower," by Hattie D. Lee, belies its title and shows its greatest fault in the absolutely unsurprised expression of the girl on the right. She is the only one of the four actors who is not thoroughly equal to her part, but this alone makes us leave the picture unsatisfied. The idea is novel, and the subject is well worth trying again, with proper attention to this one apparently insignificant detail which can make or mar the picture.

Thomas Elsum's "Writing on the Window Pane," shows an actor absorbed in the business in hand and apparently unknowing of the camera so near at hand. So far is good, and also the suggestion of something outdoors, but the range of light is too great, the scale too steep, and the middle tones given scant justice. The lighting on the back of the child is too little, so that the planes are not properly separated.

"The Simple Life," by George B. Ritter, is a transcript, faithful and meritorious, of a life now rarely to be found. It possesses great human interest, and is the sort of scene which an artist might delight in painting, and which, even baldly rendered as here, has great interest. The photographer observes that he added the flames to enhance the air of reality. There is nothing so illusive as a flame, nor so hard to represent, and it is needless to say that he has failed, but his failure is no serious blemish, and the picture will hold its own in its straightforward way with many with far higher pretensions to artistic merit.

We might continue with our criticisms, but we have now mentioned more pictures than perhaps will find space in our pages. We are much pleased with others submitted, and would like to extend the list of awards. As this is impossible, we can only wish the unsuccessful better luck on a future occasion, and trust that they will enter our next contest. Any photographer, whether or not a subscriber to the *AMERICAN AMATEUR PHOTOGRAPHER*, may compete. Prints should be sent by mail or express, fully prepaid, to Frank R. Fraprie, 6 Beacon St., Boston, Mass., before March 10.

The subject proposed for February is "A Photographic Calendar." It is to consist of four leaves, each to serve for three months and to have mounted on it a print suitable to the season. The calendar pad may be pasted or drawn on the mount. The points to be judged will be artistic merit and suitability of

the prints, taste in mounting and neatness of work. The object is to show the use of photographs for decorative and money-making purposes. Such calendars, well made, should find a ready sale in your home town. Closes March 10.

The subject proposed for March is "Photographic Postcards." The prize will be given to the most artistic and carefully made set of three postcards printed in velox, platinum, or collodion. Blue print, Eastman sepia and gelatine cards will not be accepted, because they are either not adapted to reproduction, or are likely to fade if not very carefully made. The three processes specified afford sufficient range of color and method. Neatness is essential. Masks must be carefully adjusted, all lines parallel and all whites clean, titles carefully lettered and all details looked out for. Closes April 1.

First and second prizes will be awarded, a bronze medal in each case, with blue ribbon and silver bar, and red ribbon with bronze bar, respectively. The first award includes also a cash prize of five dollars. Honorable mentions may be given to meritorious pictures which do not attain prize rank. Awards may be withheld or divided at the discretion of the judges. Prize-winning pictures may be reproduced, and unsuccessful pictures will be returned if requested.

---

#### CIRCULATING SET OF LANTERN SLIDES

The friendly competition for the purpose of getting together a set of high class slides for circulation is still open. We have received several entries and more promises. No prizes are offered, but the AMERICAN AMATEUR PHOTOGRAPHER medal will be awarded to the maker of the best set. Not less than six slides must be sent by each person and as many more as may be convenient. When the slides have been judged they will be marked according to their points of merit, and will be circulated first among the contestants and afterwards open to any reader of this magazine for home or public use.

Rejected slides will be criticised and returned to the makers. Send slides, prepaid, to J. P. Chalmers, 361 Broadway, New York City.

We would like to get the set of slides in circulation before the close of the winter season, but have only received six entries so far. Will our readers please accept this as a personal request and look up their slides if they do not have time to make new ones?

---

#### BROMIDE ENLARGEMENT COMPETITION.

A Bromide Enlargement Competition, held last year in CAMERA AND DARK ROOM, stirred up considerable interest, and a number of readers have written to us requesting that a similar competition be again held. This we have decided to do. The closing date for entries will be March 30th, so as to allow distant readers to compete.

The conditions are that (1) the prints and negative must be the individual work of the contestant; (2) a straight contact print (without any dodging) from the negative must accompany the enlargement; (3) dodging or double printing in the enlargement will be allowed, and they may be any size not over 16x20; (4) enlargements will be judged on the basis of 50 per cent. for technique, 30 per cent. for pictorial quality and 20 per cent. for choice of subject.

Three cash prizes of \$5, \$3 and \$2 will be awarded, or the AMERICAN AMATEUR PHOTOGRAPHER medal will be given to the winner of the first prize, if he prefers it to the money award.

## Our Table.

Books for review, apparatus and materials for examination and report, should be sent to Dr. JOHN NICOL, Tioga Centre, N. Y., or to any of the editors

From the Eastman Kodak Co. we have received a couple of prints on Royal Velox, the regular velox emulsion coated on the same paper as their popular royal bromide. One of the prints is toned with their sepia re-developer, and we prefer the sepia tone for this paper, although the untuned print, with its luminous and rich shadows, will create a demand for this paper wherever it is seen.

Penrose's Pictorial Annual. The Process Year Book for 1906-7. Edited by William Gamble. London, A. W. Penrose & Co., Ltd.; New York, Tennant and Ward. Price \$2.50.

For the twelfth time this standard and invaluable annual comes to our desk, larger and more interesting than ever. The articles on all kinds of process work are well chosen, practical and to the point. The greater part of the book, however, is illustrations by all kinds of processes, in colors or monotone, adequately showing the present state of the art of reproduction in all its varieties.

WITH THE CAMERA, Notes from the Illinois College of Photography and Photo-Engraving. The record of the month is, as usual, one of progress; or education going hand in hand with amusement that goes so far to lighten the labor. Perhaps the most important item of the month is the visit to the engraving department of Mr. Paul Hammersmith, Secretary of the National Engravers' Employer's Association, who represents over a hundred open shops, and has been instrumental in finding situations for many of the students. We need hardly add that he expressed much gratification both with the method and means of the education.

The College Athletic Association gave a thoroughly successful dance on the 8th, visits of former students were numerous, as were reports of successful graduates both as Assistants and employers; nor was there wanting the almost usual mention of the wedding bells amongst them.

DEUTSCHER CAMERA-ALMANACH 1907, vol. III. Jahrbuch der Amateur-photographie. Unter Mitwirkung bewährter Praktiker herausgegeben von Fritz Loescher. About 300 pages with 170 illustrations. Berlin, Gustav Schmidt. Price bound, 4.25 marks or \$1.25.

This is the third appearance of this excellent annual before the photographic world. Its evident success is fully justified by the pleasing appearance of each annual volume, and the valuable and varied table of contents. Not only have the editors this year presented excellent practical and artistic articles by a large number of both well-known and new contributors, but the pictures are of unusual excellence. The frontispiece is a colored reproduction of a colored gum print, and is excellently done. The volume is one which is worthy of a place on the photographer's shelf beside the other annuals of the world, to which it is a worthy companion.

PROMINENT in the line-up of good things for 1907, are the new Angelo Platinum papers. The Angelo papers have always had a reputation for quality

and uniformity, and under the new and greatly improved conditions of manufacture, bid fair to far excel their past record. Angelo Sepia Platinum has the great advantage of developing in a cold bath, doing away with the necessity of heating the bath for each batch of prints. In using the cold bath, development is not instantaneous, thus affording much greater control in development. Even under the most trying conditions, there is no evidence of solarization or smoky shadows, the prints coming from the clearing bath clean and brilliant, with gradations from highest light to deep shadow. Angelo Black and White papers recently introduced possess every good quality of the Angelo Sepia papers, and are bound to win favor on merit alone from all exacting and discriminating photographers.

From the ANTHONY & SCOVILL COMPANY, Binghamton, N. Y., we have received a copy of their 1907 Catalogue of Photographic Supplies, a handsome book of 200 pages, printed on fine coated paper. The many illustrations of apparatus and cameras are all direct half-tone photographs from the subjects, and show up the articles in a convincing manner that is impossible with woodcuts. Everything needed for the laboratory or studio is listed in the catalogue and the various departments classified or indexed for easy reference. If your dealer cannot supply you with a copy, send ten cents to cover postage to the Anthony & Scovill Company, Binghamton, N. Y.

Have you given Kodak Dry Mounting Tissue a trial? There are really so many good practical features to commend this new method of mounting that you are doing yourself an injustice in not at least affording it a hearing. In the first place, it does away with all curling, even on thin mounts—with the ordinary mountant you know the difficulties. For mounting squeegeed or ferrotyped pictures it is ideal, as it ensures perfect contact without destroying the glossy surface. For folders, multiple mounting, or any sort of mounting requiring the use of thin stock, Kodak Dry Mounting Tissue absolves you from all unsatisfactory devices in the endeavor to secure perfect contact and flatness. The process of mounting with the tissue is exceedingly simple. Just tack a sheet of tissue the right size to the back of the mount with the point of a hot iron, place print and tissue in proper position on the mount and press for a moment with a hot iron—that's *all*. Once tried, you will never revert to the older and unsatisfactory methods.

The Goerz Catalogue for 1907, just published by the C. P. Goerz American Optical Co., of New York, is the most beautiful and elaborate catalogue ever issued by any firm of lens makers in this country. The cover, 8 x 12 inches, is printed in two colors and gold, and is a reproduction of the photograph by Steichen, which won first prize in the Goerz cover competition two years ago. The reproduction is admirable. The frontispiece is a beautiful photogravure of "Bird Life," by A. Radcliffe Dugmore, well worthy of a frame, and an admirable example of lens work. After some preliminary advice on the choice of lenses, come full descriptions of the various Goerz anastigmats, Celor, Dagor, Pantar, Syntor, Alethar, the wide-angled Hypergon, prisms, ray-filters, and telephoto lenses. The various types of Goerz-Anschütz Cameras, shutters, stereoscopes and binocular glasses are considered, as well as various sundries. All these goods are carefully illustrated. A number of pages of very useful tables on lenses follow. The last twenty pages of the book contain fine half-tones of various kinds of work done with Goerz lenses. The catalogue is a very hand-

some volume, and will be sent to any of our readers on receipt of nine cents to pay postage.

THE EASTMAN KODAK COMPANY are now distributing through the dealers, or direct, the *Velox Book*, *Bromide Enlarging with a Kodak*, and *Kodak Home Portraiture*. Naturally, these books are designed to further the interests of the Eastman Company and their products, but, nevertheless, as good, practical, up-to-date instruction books, they are unsurpassed. The *Velox Book*, as stated on its cover, is devoted to the "working of a simple paper told in simple terms," and explains in detail every phase in the manipulation of this popular paper. It contains a glossary of technical terms invaluable to the novice, and the suggestions for double printing, masking and special manipulations make it invaluable as a working manual for all photographers. *Bromide Enlarging with a Kodak* removes all the mystery from this fascinating branch of photography, and fully explains by means of clearly written text and explanatory diagrams just how any amateur possessing a Folding Pocket Kodak, or, in fact, almost any camera, can produce with but trifling expense, bromide enlargements of the highest quality. Descriptions of various grades of bromide paper and instructions for use are also included. *Kodak Home Portraiture* will both fascinate and interest every photographer, whether novice or expert. It is a veritable art work, containing a number of remarkable examples of home portraiture, and all made with the simple Kodak. Good, practical suggestions are made for making equally successful pictures, and from cover to cover is replete with good things. Do not miss this opportunity to make a permanent addition to your reference library.

The Folmer & Schwing Co., of Rochester, N. Y., are desirous of securing negatives of motion pictures made with the Graflex Camera. For suitable negatives of this kind they will exchange goods of their manufacture. Those who use the Graflex and have negatives of this character might find it of interest to submit their prints to Folmer & Schwing Co., Rochester, N. Y.

HOME PORTRAITURE.—Bausch & Lomb Optical Co., Rochester, N. Y. This is a beautiful little pamphlet containing about a dozen excellent reproductions of first-class home portraits taken by various American amateurs with Bausch & Lomb lenses. They certainly bring out with admirable strength the good qualities of the lenses. A very useful article on Home Portraiture and suggestions as to the choice of a lens for various phases of the work are included in the pamphlet, which gives also prices of various lenses made by the company. The brochure will be sent to any photographer on receipt of a request.

---

## Our Portfolio.

---

Prints for criticism in "Our Portfolio," only one at a time and only one each month should be sent to DR. JOHN NICOL, Tioga Centre, N. Y.

2214. CARL KREBS. "When The Sun Is Low" is not nearly up to your usual mark, either in subject, composition, or technique. Taking the last first, there never was a sky so white, even with a noon-day sun; far less when that sun is low; nor any part of a corn stack so black as are those represented here. The fault is under-exposure and over development, parts of objects in

direct light being whiter than in nature, while those in shade are simply black. Then, to secure the stacks of the desired size you have gone so near as to give a perspective that seems altogether unnatural, those in the immediate foreground being many times larger than those immediately behind; making it look as if the three nearest were really shocks of maize while those behind were the diminutive buckwheat. In other words, the lens was of much too short a focus for the purpose. Once and a half or twice that length and twice or thrice the exposure with development for the lights would have given the technique all right; but even then it would have been nothing but a record of a portion of a corn field from not the best point of view.

2215-6-7-8-9. H. YAHAGI, Tokio, Japan. As before, we make an exception, noticing all the prints you have sent instead of the one to which we confine our readers who are nearer. "Urami," a water-fall, is an interesting subject and better managed than such subjects generally are; the lighting being such that the surroundings are as well exposed as the fall itself. The only fault, and it was unavoidable, is the all too dark shadow on the left. Of course, it is more of a record than a picture, but it is a record of a high quality. "Thrashing The Rice" is more of the kind of subjects that we have suggested you should send us, something peculiarly connected with Japan, although it is hardly sufficiently defined to show clearly the method adopted for the purpose. A longer exposure would have made the record better understood and lighted the all too dark shadows. "A Foggy Morning." A part of Uyens Park shows something of the decoration although we hardly understand the object of the heavy fence posts. The selection is well chosen and the fog well rendered. "A Summer Day," two children bathing in what seems a pool or part of a stream, is practically a failure, and that from much under exposure, the water being simply white paper. It is of no interest and not worth printing unless to please the mothers of the children. "Evening Cloud," a narrow stream with a sail boat just in the best place, and a really fine cloudland above, is to us the most attractive of the lot; the effect being vastly increased by the beautiful rippling of the water. True, the grass on the banks is simply black, but with detail enough to be suggestive. The little patch of light on the sail is charming and would have been even more so had it been just a trifle broader. Altogether we like this very much.

2220. F. E. WEEKS. "December Fog" does not appeal to us in any way, nor does it suggest a foggy landscape as we have ever seen it. A fog is dense only by accumulation, that is, the density increases with the distance of the objects, but here it is as dense in the foreground as anywhere else; more like a print from an accidentally light-fogged negative. So dense is the fog that it is difficult to make out what it is, but it seems to be a part of a stream or pond with reflections; but, as already said, it does not appeal to us as having been worth printing.

2221. C. H. BROOKS. "I Can't Read, Papa," a boy sitting with book in hand but looking as if to his father with just such an expression as the statement would indicate, is better than you seem to think. Position, expression, and arrangement altogether are really good, while the happy medium between the sharp and the fuzzy gives character to the portrait. Doubtless the mother, or at least most mothers, would find fault with the lack of definition in the



2214

WHEN THE SUN IS LOW

CARL KREBS





2219

EVENING CLOUD

H. YAHAGI

dress and lower parts of the figure, but those are what more than anything else makes it a portrait rather than a mere likeness. But there is one glaring fault, the background. Sufficient care has not been taken to separate the figure from it, it looking more as if cut out and pasted on, and much worse than that are the series of large obtrusive circles scattered over it, attracting the eye and keeping it from the intelligent face; or dividing the attention painfully. But for the background we should have had nothing but praise for the portrait.

2222. J. W. SMITH. "The Twins," a cow with two calves, need only be criticised from a technical point of view, there being nothing of either the pictorial or the artistic about it. Such a print should, from its nature, be sharp and correct in texture and this is neither. The exposure has been too short and the development too long, the result being merely white and black without an indication of hair, which would be the charm of the representation. Your focusing scale is not quite correct or you have not judged the distance correctly, the lens having been just a shade too near the film, making the distant trees sharper than the cow and her calves in the foreground. Such subjects depend for their beauty on correct values which in its turn depend on correct exposure; so that while breadth is desirable in large spaces, detail and gradation are the essential in such as this.

2223. JOHN HOWARD PAINE. "Golf Course In January" might better be called a snow covered landscape, and a very good one at that; in fact one of the best renderings of snow that we have seen for some time. Too often snow comes to us merely white paper while here it has texture with light and shade that is admirable, and that is rarer still, there is a fine rendering of atmosphere in the distance. And in this we have a lesson that should be taken to heart by probably 90% of those who use the Portfolio. It is in the question of exposure. Most snow scenes tell of exposures of small fractions of a second and often with the lens stopped down, but this was exposed for *one second* with f-8, which tells the whole story.



2216

THRESHING

H. YAHAGI



2217

FOGGY MORNING (Uyeno Park, Tokio, Japan)

H. YAHAGI



2223

JOHN HOWARD PAINE

GOLF COURSE IN JANUARY  
Time, 1 Sec., Stop U. S. 4. Dull light.

2224. A. G. HOLCOMBE. "Violin Solo," a girl playing a violin, is good as far as it goes, but would have been better if smaller so as to have given the full figure, cut off at the middle, with a part of the hand missing, it is not satisfactory. Then, the lighting is not so good as it might easily have been. It has been altogether in the front, giving a flatness, a lack of contrast that very much lessens its value. Pose and expression are unexceptional, but had the light been more to the side the difference would have been great.

2225. CARL KREBS. "Siesta," a woman lying on a lounge with eyes open and a smile on her face, is, with one exception, very good, the fault being want of texture on the face, it being more like paper than flesh. A shorter development would have prevented it. The greatest difficulty the photographer has to contend with seems to be to know just when to stop development. It is apparently always forgotten that the action is accumulative, and that the lights instead of being graded are all made, in the negative, equally opaque.

---

### Camera and Dark Room Picture Criticism.

---

Prints for this department should have the name of the sender and the working details written upon the back and be addressed to J. P. CHALMERS, 361 Broadway, New York City.

---

W. W. BRACKENRIDGE sends nine prints, too many for notice in one number. "Outdoor Portrait" (2 sec., f-8, October, 4 p. m., dim light) is from a good negative, rich in tone values. The girl is too close to the natural background, there is no separation of planes, and the figure looks like a poster stuck on the wall behind. The lighting is also too flat for a portrait, there



2225

SIESTA

CARL KREBS

being no modeling of the features. "High School Building" and "The Church" are wonderfully good specimens of architectural photography. As you have noted, the background spoils what would have otherwise been a good photograph of "A Cow." The two snap-shots of "Mardi Gras Floats" are specimens of the usual result in such cases, but better lighted, due to your habit of using the f-8 diaphragm. The "School Interior" is not as good as some of your others reproduced in December CAMERA AND DARK ROOM; this has a jumbled-up look about it, although the teacher and her pupils are very well rendered. The flesh tones are well rendered in the picture of the little fellow in overalls, also in the group "Three Queens and a Jack." The grouping in this is fair, but the back ground is obtrusive. We doubt if the engraver in reproducing this will be able to hold the detail in the white dresses and the dark shadows which is visible in the print.

H. W. DURGIN. "Close of Day" and "After the Shoot," two landscapes with figures that are suggestive and artistic in treatment. Both are good compositions, but the sky in each is weak, and is the one thing which you can remedy in the printing if you cannot get it in the negative. (Reproduced.)

A. H. SEIFERT. "A Winter Scene" is a fairly good composition, but the exposure of 1 sec. at f-8 with ray screen does not seem to have been half enough. The trees are mere silhouettes and there is no snow detail—snow and sky are alike in tone, whereas you could at least have given the sky longer exposure in the printing and brought out the cloud formations, of which there is a slight trace visible. You have also erred in selecting a contrast giving paper for a contrasty negative. "The Builder" is a subject out of which you can make



W. W. BRACKENRIDGE

## THREE QUEENS AND A JACK

a far better picture if you will remove the part of a chair and place the subject on a rug or carpet with a less confusing pattern; also manage to control the light so that the building blocks are not so much in evidence. One-fifth second is too short exposure for such a subject, try one-half and do not carry the development so far.

O. D. RAMSEY. "House over the Hill" is a winter scene that impressed us so well that we had it reproduced. In comparing the reproduction with the original print, however, we must offer an apology. The fine detail in the snow and the traces of color in the sky are lost in the reproduction. The best we can say of it is that it is a capital rendering of the subject and a picture which grows upon the imagination.

W. A. VAN WAGNER. "A January Day" is another print which has suffered at the hands of the engraver. It is a simple composition well photographed and breathes the spirit of the scene, the cold, bleak aspect of Nature in winter's garb. There is no better medium for rendering winter effects than platinum, and our next choice is special portrait velox, which would have suited your negative better than the regular velox.

JAMES S. MURRAY. "The Toilers" is a landscape with figures showing good composition, and with the figures well placed and showing good action. The photography is good and the printing and mounting shows excellent taste, but there is one discordant note, and that is the strip of white paper which serves for the sky. If this had been toned down in the printing to harmonize



CLOSE OF DAY

H. W. DURGIN



AFTER THE SHOOT

H. W. DURGIN



HOUSE OVER THE HILL

O. D. RAMSEY

with the rest of the picture it would have been much nearer the perfection mark. "The Breaking Wave" is better in tonal quality, and is one of the best renderings of the subject we have received for some time. The common defect in such subjects is harshness and the cotton-woolly appearance of the spray. In this the exposure has been correctly timed and the idea of motion is well rendered. We feel like complimenting you on the first pictures submitted, and hope to hear from you frequently.

H. E. STOUT.—"Christmas Morning" is fairly well done, though rather underexposed in the shadows about the tree. Considering the difficulties of the lighting, however, you have done as well as could be expected. The suggestion of a misty day outside is excellent. The little girl is too self-conscious, and is evidently posing for her picture. The portrait is well arranged, but has a serious defect: the highest light is the white reflection covering almost the whole surface of the hanging picture. Here again the model is not attending to business, but very seriously and with strained attention waiting for the camera to click.

JOHN KIRK.—You have sent too big a batch of prints for us to give any one much attention. They are of unequal merit, and show that you have by no means mastered your apparatus. They show both under and over exposure, under and over printing. "The Forth Bridge" is a very poor piece of copying, much under-exposed and over-printed and faithfully reproducing reversal, re-touching and defects of the original. The best of the lot is "Chicago Flyer," which has good atmosphere and composition and some feeling of motion. The print shows abrasion marks, due to careless manipulation. Buy an exposure meter or table, and try to get correct exposures.



A JANUARY DAY

W. A. VAN WAGNER

R. H. BEIL.—“The Path that Leads to Success” is a good title, making us at once realize that the building in the distance is a schoolhouse. The path, however, is the least prominent feature of the picture, and the architecture of the school is too angular to make the sky line pleasant. Clouds are very good, but the foreground is over corrected, exposure being too short for the shadows. Still it is technically much better than the average amateur print.

LESTER E. BRUNDAGE.—A little print very pleasing in tone and quality, but with no reason for oval trimming unless it were to remove bad corners. Every line is horizontal, and the picture is divided into four horizontal bands. There is no rhyme or reason in softening the detail in the left half of the picture, while objects in the same plane on the right side are microscopically sharp. Still it gives a very pleasing impression, which grows by prolonged inspection.

FRANCES BAKER.—From an inspection of the Camera and Dark Room Exposure Tables, price ten cents, you would have discovered that the proper exposure for 1 P. M. in January, bright light, stop  $f/32$ , Hammer extra fast plate, on snow, would have been  $\frac{1}{2}$  second. You gave  $\frac{1}{50}$ . Assuming that the light was intense, that you mean U. S. 32, and that you used the fastest plate on the American market, the exposure should have been  $\frac{1}{12}$  second. Thus you should have given at least four, possibly twenty-five times as much exposure as you did. On glancing at the print we estimated that it needed ten times the exposure given. You have wasted one plate (value five cents), one sheet of paper (value two cents), developer and hypo (value one-half cent), time (value—?), all on one picture. Moral: Buy an exposure table. You will then get skies which are not chalk, trees not made of sheet iron and a general harmony of values which will reproduce some of the infinite beauty of nature. The





THE BREAKING WAVE

JAMES S. MURRAY

arrangement of your picture is very good, and when you have learned to give full exposures and make thin negatives, you will have something to be proud of.

H. D. LAFAYETTE.—Your portrait of a girl is well lighted, natural and unconstrained. The surroundings are not good, but pose is excellent. The young man's head is very badly lighted, merging into the background in a most unpleasant manner. The retouching is most unpleasant. No human being ever had flesh like that unless after a severe attack of smallpox.

A. SCHOFIELD.—Your girl is very badly vignetted. It is distressing to see a moderately heavy person leaning for support on a chair back which suddenly thins out and vanishes. There is no reason for removing the right arm and introducing the heavy triangular shadow below the blouse. Much underexposed. The old gentleman is better for exposure, but the expression of the eyes is strained and the grasp of the pipe too vigorous to be natural.

D. E. MATHESON.—“A Winter Evening” gives the desired effect very well. The snow looks real and the atmosphere is good. Tone down the roof in the distance until it no longer sticks out of the print, and your picture will be a success.

ANGELO FRANCIS.—Your landscape seems a little under-exposed possibly, but this is apparent only in the shadows, the sky and distance being fairly good. The road is too central and the focal length of the lens rather short. But, after all, the whole is said when we say the scene is merely pretty, and hence not worth taking. It is no different from thousands of other prints of a road we have seen.

FRANCES BAKER.—“Leisk Creek,” a snapshot of water, foliage and sky, is strong proof to you that time exposures and not snapshots must be given to such subjects. There is a patch of white paper for the sky, a mass of black for trees, while the water under the trees is equally black paper, except under the patch of sky, where it is also pure white paper. The picture is a nice bit of composition and worthy of better care in the photography.



THE TOILERS

JAMES S. MURRAY

## Society News.

CAMERA CLUB OF NEW YORK: On Friday evening, January 25th, Mr. Malcolm Stuart gave an interesting exhibition of slides illustrative of a trip through Southern Mexico. The negatives were made by means of tank development, and their quality was very uniform. On Friday evening, February 8th, the Interchange slides of the Kodak Camera Club were exhibited and proved to be an interesting collection, composed as it was of many leading prize pictures by well known makers.

After the exhibition there was shown by Mr. Miles Greenwood a very unique folding focal plane combined roll film or plate hand camera of foreign manufacture, which was adapted to make  $3\frac{1}{4} \times 4\frac{1}{4}$  pictures. There was also special construction in the bed of the camera by which an extra length of bellows could be drawn out to use a longer focus lens, and convenient means were provided for adjusting laterally or vertically the lens front. Copying or enlarging in a small way could be done with the camera. It was very light and compact, quickly and easily operated. A very good carrying case with a strap was provided for carrying the camera. It was regarded by the members as quite an improvement over anything seen here in the same line, of American manufacture. Sample film negatives were shown made with the camera, also novel metal plate holders of simple construction.

On the evening of February 14th Mr. Leonard M. Davis gave an illustrated lecture with slides entitled, "A Talk on Alaska."

---

### REPORT OF RELIEF COMMITTEE WORK OF THE PHOTOGRAPHERS' ASSOCIATION OF CALIFORNIA.

This Committee was appointed by members of the regular Photographers' Association of California for the purpose of receiving money and contributions of any kind from any persons or associations for the benefit of such photographers of San Francisco and State of California generally that lost their studios, their

means of livelihood or had otherwise suffered by the great disaster caused by the earthquake of April 18, 1906, and the devastating fire which followed, lasting three days and three nights, and totally destroying the beautiful city of San Francisco.

Many other California cities also suffered severely from earthquake and fire at the same time, and their people, too, needed assistance.

The Relief Committee of the Photographers' Association of California consisted of the following members: O. H. Boye, Chairman, T. H. Wilton, I. W. Tabor, Jacob Fowzer, Geo. H. Knight, O. V. Lange, E. J. McCullagh, Secretary, Paul Lotz, Treasurer.

Dave Mullender deserves credit for having taken an active part in the relief work at the start, but had to relinquish, on account of accepting a position away from San Francisco.

Special credit is due to Mr. O. H. Boye, the Chairman, and other members of the Relief Committee, for the prompt and business-like way in which the relief work was attended to, receiving the various sums so kindly donated by our Eastern and other friends amongst the photographers and distributing these sums to those who were most justly deserving and properly entitled to same, at the same time trying to do the greatest good with the amount at their disposal.

Mr. Boye and other members of the Committee, though themselves great losers in the general calamity, did everything in their power to assist others, devoting much of their time, and met all expenses for clinical and other work themselves without any compensation or reward.

Amongst others, the firm of Hirsch & Kaiser, photo supply dealers of San Francisco, surely deserve to be included in this report, and most hearty credit should be given them. Although this firm were heavy losers in the great disaster, they immediately offered to assist the Relief Committee in their work, lending their store for purposes of meetings, assisting those who were aided by the Committee to receive prompt cash for their checks, and generally showing the open-handed Western spirit of good will to all who needed it.

To the officers and members of the Metropolitan Section of the Professional Photographers' Society of New York, for their sympathy, energy and enterprise, there is much credit due.

Within forty-eight hours after the disaster these men had formed a Relief Committee which subscribed \$500.00 and was the beginning of the General Relief Committee, organized to assist California photographers.

Great credit is also due to the various other photographers' associations, also the manufacturers of photographic supplies, for their liberal contributions, and the work they have accomplished.

When it is considered that most of the Eastern photographers and manufacturers had already been called upon, and had contributed liberally to the general Relief Fund, in connection with the great disaster, their willingness to again subscribe to the Special Relief Fund for California photographers who had lost all, or nearly all, is specially commendable.

Amongst others of our well-known Eastern photographers to whom credit is due for active Relief Committee work are:

B. J. Falk, Chairman, Jos. Byron, Treasurer, Pirie MacDonald and other members of the New York Committee, Dudley Hoyt and others of the Western New York Section, W. H. Partridge, Chairman, F. R. Barrows, Treasurer, Will Armstrong and other members of the Boston Committee, the photographers

of Milwaukee, Wis., Philadelphia, Pa., and St. Louis, Mo., and a few photographers from the State of California itself.

Also we cannot omit to mention the generous contribution as the result of the kindly interest of Mr. Pirie MacDonald, of New York, from Mr. Edmond Vallois, President, and members of the Chamber Syndicate de la Photographie, Paris, France.

Amongst the manufacturers that contributed liberally in the way of money, photographic material, apparatus, etc., to enable such of the California photographers who had suffered, to start in business again, were Eastman Kodak Co., of Rochester, N. Y., G. Cramer Dry Plate Co., of St. Louis, Mo., Bausch & Lomb Optical Co., of Rochester, N. Y., Willis & Clements, of Philadelphia, Pa., The C. P. Goerz American Optical Co., represented by L. J. R. Holst, of New York City, and many others, almost too numerous to mention.

If there are any others to whom credit is due, and whose names may not be mentioned in this brief report, they can feel assured that the omission is not intentional on the part of the writer, nor due to any wish not to appreciate their kindness and services. They can feel assured that their interest in the California photographers was fully appreciated just the same.

The following is the result of contributions from all sources: The total amount of cash money received was nearly three thousand dollars, most of which was donated by the photographers of the city and State of New York and city of Boston. Adding the value of other contributions from the manufacturers of photographic supplies, consisting of photographic materials, dry plates, apparatus, etc., the total value of all contributions from all sources was a little over five thousand dollars, which was received and distributed by the Relief Committee of the Photographers' Association of California, all of which came just in the right time, and was very much appreciated by the Relief Committee, and the photographers of California generally, doing much good where most needed.

---

#### CLUB NOTES—PITTSBURG, BUFFALO, BOSTON.

The Photographic Section of the Academy of Science and Art of Pittsburg, recently held their first lantern slide exhibition in the beautiful new lecture hall connected with the Carnegie Institute. A large and appreciative audience was in attendance and saw one hundred and five fine slides. An excellent new feature has been added to this society's work, which, with the Capital Camera Club, of Washington, D. C., has been chiefly instrumental in forming a National Print Interchange, which will give each society represented a monthly print exhibit of fifty pictures. The best societies in the east are in this work, including Portland, Me., Boston, Philadelphia, Baltimore, Washington, D. C., Pittsburg and a new group of workers in Buffalo known as the Photo-Pictorialists of Buffalo. In the above societies the best pictorial photographers of the country are members. The Photographic Section is much elated over the success of this new enterprise, which is already in operation and will be productive of much pleasure and benefit to its members and their friends.

Thus reports Pittsburg. As a member of the Boston Camera Club's Exhibition Committee, the writer may say that Boston has not yet entered the print interchange. The Boston club has sent its annual exhibition to Portland for two years past, and Portland has reciprocated. Both societies have desired

to include others, and Portland, Washington and Pittsburg proposed a wider circle to Boston at about the same time. As Boston had already arranged some ten exhibitions for this winter, and as no adequate selection of prints can be made until after the annual exhibition, the Boston club will not send out a set of prints until next fall. The annual exhibition will be sent to Portland as usual.

The Photo-Pictorialists of Buffalo, mentioned above, are said not to conflict with the Buffalo Camera Club. They are as follows: W. H. Porterfield, Chas. Booz, G. Edwin Keller, John M. Schreck, S. S. Lloyd, O. C. Anthony, Will A. Hatch, Edwin B. Sides.

---

#### BOSTON CAMERA CLUB ANNUAL EXHIBITION, 1907.

The Seventeenth Annual Exhibition of Photographs by members of the Boston Camera Club will be held at the Club Rooms, 50 Bromfield Street, Boston, and will be open to members and their friends at the regular meeting on the evening of Monday, the first day of April, at eight o'clock. On April 2d, the exhibition will be open to the public, and will continue open until Saturday, April 13th, inclusive.

The committee in charge earnestly requests every member of the Club to contribute at least two pictures and as many more as possible, so that the exhibition may be a thoroughly representative one in every respect.

#### RULES OF THE EXHIBITION.

1. Any photograph, never before exhibited by the Club, may be submitted.
2. One picture from each contributor will be selected by the committee for exhibition, and as many more as they may think desirable.
3. Photographs sent in for exhibition may be either framed or mounted without glass, but if passe-partout mounting is used, the rings on the back must be fastened through the board and not glued to the surface.
4. Each photograph shall have a title and pseudonym on the back. The name of the exhibitor shall be withheld from the committee until after the selections have been made. The name of exhibitor with pseudonym shall be enclosed to the Secretary, and not sent with the pictures.
5. All exhibits must be sent to the Club rooms, addressed to the Exhibition Committee, on or before Monday, March 25th.

W. R. Cabot, W. G. Corthell, F. R. Fraprie, W. R. Richards, J. P. Loud, W. H. Wing, Exhibition Committee.

The Club has had during the present winter one-man exhibitions lasting two or three weeks each, by C. F. Clarke, Wendell G. Corthell, Frederick Haven Pratt, R. Dührkoop, and Civil War Photographs by Capt. D. Eldredge. Several others are promised. The club is also contemplating exchanging exhibitions with several prominent eastern clubs.

---

#### AKRON CAMERA CLUB.

We are advised by the Treasurer of the club, Mr. E. J. Hoskins, that recently the club has added thirty new members to its membership and has transferred

its quarters to the Y. M. C. A. Association in Akron, where they have excellent facilities for photographic work and meetings. The club is anticipating an increase of interest sufficient to enable it to enter a set of slides for the Interchange next fall.

- - - - -

#### BUFFALO CAMERA CLUB EXHIBITION ANNOUNCEMENT.

The gratifying success which has attended the past exhibitions of the Buffalo Camera Club, makes it incumbent upon the officers and members of the club, to do their utmost to excel in the coming exhibition. This can easily be done, if each member does his part; as there must be an individual growth, which will show in the ultimate and combined efforts of the members.

This club has established an enviable reputation, which is not limited by the confines of the city. Other clubs are *sitting up and taking notice*.

Let us therefore make this Fifth Exhibition show a marked improvement. Certain important classes have been weak in past exhibitions, and this gives us an opportunity to make the coming exhibition materially better and broader.

To this end a cup will be presented by the Executive Committee to the club, as a general prize, to be known as the *Executive Committee Cup*.

This cup must be won three different years by the same exhibitor before it becomes his property. At the opening of each exhibition it is to be returned to the club for competition until it has been won three times by the same exhibitor.

The cup is to be awarded for the best six pictures from the exhibit of any one member. The award to be made by the regular jury, on points, as herein-after provided. The name of the winner is to be engraved on the cup after each competition.

Mr. W. S. Humbert offers a cup to be competed for by members who have never won a prize, or an honorable mention, in any previous club competition. This prize will be known as the *Humbert Novice Cup*.

Prints may be in any medium, and the cup is to be awarded for the best five pictures from the exhibit of any one member, on the points awarded by the jury.

Mr. James A. Johnson also offers a prize cup, as an award in a special architectural competition, to be known as the *Special Architectural Cup*.

The cup will be awarded to the most artistic exterior photograph of the Albright Art Gallery, the print to be by any method, and not less than seven inches by nine inches, and not over eleven inches by fourteen inches in size. The view to include at least one-third of one side of the building.

The prints will be judged by a jury of architects, selected by the Exhibition Committee, and the cup will be inscribed with the successful competitor's name.

In the general exhibition there will be nine classes, as follows: 1. Landscapes. 2. Marines. 3. Genre Studies. 4. Figure Studies. 5. Portraiture. 6. Still Life. 7. Animal Studies. 8. Street Scenes. 9. Architecture.

#### CONDITIONS.

Entries for the Exhibition and Competition must be made on blanks which will be furnished for that purpose.

All prints must be either framed or under glass; and be in the hands of the exhibition committee on or before the 6th day of March, 1907.

Every Picture entered in the exhibition is to be accompanied with an Entry Blank, properly filled out. Entry Blanks will be supplied by the Exhibition Committee.

The Exhibition Committee reserves the right to properly classify any picture, which in their judgment is improperly classed by the exhibitor. Also to reject any pictures which are not deemed of sufficient merit.

Three awards will be made in each class, by the most competent and unbiased jury which the exhibition committee can secure, and not necessarily by the same jury in each class.

The Awards will be made according to points as, follows:

For Composition.....	60
Photographic Excellence.....	30
Mounting and Framing.....	10

H. Wilson Saunders, Exhibition Director. James A. Johnson, Charles D. Arnold, Walter E. Bertling, Harlow H. Boyce, Exhibition Committee.

---

## Answers to Correspondents.

---

Questions for answer should be sent to F. R. FRAPRIE, 6 Beacon Street, Boston, Mass., or to any of the editors whose addresses are given elsewhere. When a personal reply is desired a stamped, self-addressed envelope must be enclosed.

---

H. H. H., Fountain Springs.—We should judge, as you say your snap shots come up clear and brilliant, that your developing light and developer are properly adjusted. Therefore your time exposures are perhaps not fogged at all, but simply so much over-exposed that they get away from you in development. We can hardly advise you from the limited information you give. Perhaps the sight of one of your negatives would enable us to diagnose the case more satisfactorily.

Poore's "Pictorial Composition" is probably the best book on the subject which you can get. Dow and Marshall have each written a book on composition, which are also useful, but we would advise you to get Poore first.

T. F. S., Beaumont.—Your letter has been referred to a firm who will be able to give you advice and furnish the goods you want. You are really asking a good deal when you want to do every variety of photographic work with one piece of apparatus.

C. F. M.—The dyes you mention for color filters are manufactured in Germany by Meister, Lucius and Brünig. We have referred your letter to their American representatives, who will supply you with what you need.

I. M. F.—The directions for making photographs on glass or china are far too long to be given here. There are two principal processes, the substitution and the dusting-on. Full information may be found in Woodbury's Encyclopædic Dictionary of Photography, while our publishers can supply a book entitled Photo Ceramics for 50 cents.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co., (Incorporated), 361 Broadway,  
New York.

Address all remittances and business communications to the publishers.  
The contents of this magazine are protected by copyright and all rights reserved.

---

## EDITORIAL STAFF:

DR. JOHN NICOL, TIOGA CENTRE, N. Y.

F. C. BEACH, 361 BROADWAY, NEW YORK CITY.

F. R. FRAPRIE, 6 BEACON STREET, BOSTON, MASS.

J. P. CHALMERS, 361 BROADWAY, NEW YORK CITY.

---

VOL. XIX.

MARCH, 1907.

No. 3.

---

## CONTENTS.

A Substitute for Platinotype—A. J. JARMAN.....	147
Coloring Photographs—Water Colors—JAMES C. SAVERY.....	152
Snap Shots at Snow Landscapes—JERE MONTAGUE.....	157
Hints to Beginners—Development—BURTON H. ALLBEE.....	161
Editorial Notes.....	163
International Photograph and Post Card Show.....	165
The Snow Competition—F. R. FRAPRIE.....	167
Readers' Contribution Box—Tweezers for Handling Photographic Paper —Ramblings—The Ballade of the Gummist.....	169
Making up Solutions.....	171
Use of the Magnifier with Fixed Focus Cameras.....	173
Preservative for Sodium Sulphite.....	175
Firelight Effects by Daylight.....	175
Green Tones on Bromide Paper or Post Cards.....	175
Our Portfolio—Picture Criticism.....	178
Society News—Portland, Me., Club—Troy Camera Club—Toledo Camera Club—Akron Camera Club.....	186
Trade Notes—Our Table.....	188
Answers to Correspondents.....	191





LONELINESS

(First Prize, Snow Competition.)

A. D. MOORE

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Edited by Dr. JOHN NICOL, F. C. BEACH, F. R. FRAPRIE, J. P. CHALMERS.

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

Original manuscript solicited and paid for on publication. New ideas, practical hints and reports of club meetings desired. Matter intended for publication in any number should reach us not later than the 15th of the previous month.

---

Copyrighted, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (All rights reserved.)

---

VOL. XIX.

MARCH, 1907.

No. 3.

---

## A PRINTING OUT SUBSTITUTE FOR PLATINOTYPE.

BY A. J. JARMAN.

The fact that the cost of platinum paper of all kinds is becoming higher in price at a rapid rate is causing many users to look around and ascertain whether a close substitute for the present paper can be found.

The cost of platinum will go still higher, this is caused by the limited supply of this rare metal, and the ever increasing demand for its use for the leading-in wires of the modern electric incandescent lamps. Platinum is the only metal known that possesses the same coefficient of expansion as glass, and consequently is the only metal that can be used for the above purpose. A further demand for platinum in the construction of retorts for the distilling of sulphuric acid, is also another cause of increased demand. This metal is not attacked by sulphuric acid, hence its use for the above purpose; more than this, the production of sulphuric acid is a matter of national importance, the enormous consumption of this acid, used for the production of so many other chemicals causes it to stand equal almost to coal and iron for its national usefulness. An ordinary sized platinum retort of the size of the usual wash boiler costs from \$22,000 to \$30,000, with these facts standing out so prominently and the demand for the metal being daily on the increase with the supply at the same time being so limited, will readily go to show that platinum will still go higher and higher in price.

To-day the price of this metal is twenty-eight dollars per ounce, and there is every prospect of its going to fifty dollars per ounce, twelve years ago its price

was but eleven dollars per ounce, the world's supply being about 33,000 pounds a year, so that with the prospect of this metal going to a much higher price, and the consequent increase in the cost of platinum paper, the consequence must be that the cost of platinotype photographs must also be increased, if the photographer is to make a living profit from his product.

The object of the present article is to point out how a paper can be made that is capable of giving prints that in richness of color, intensity of the blacks, and clear whites leaves nothing to be desired as a close approach to the platinotype itself. Paper of a good quality will be required, such as that used for plain salting purposes and can be purchased in sheets, about the size of 16x23 inches for fifty cents per dozen, for thicker paper, and for making the necessary trials, the Steinbach paper can be purchased at almost any dealer in artists' material by the yard. Whatman's hot pressed drawing paper can also be used for special purposes, and will produce effects that almost rival a steel engraving.

The material required for the preparation of the paper is not costly, care and cleanliness are essential in every particular. Some wood clips will be required that *must* have been coated over the front portion of the clip with shellac varnish, a couple of coatings will be necessary, this water proof coating will enable the clips to be washed and prevent the absorption of the sensitizing solution.

The mixing of the sensitizing liquids must be made in clean, wide mouth, amber colored bottles, and the liquid when once mixed, must be filtered through absorbent cotton in a glass funnel, no metal of any kind must be allowed to come into contact with the sensitizer and all operations of mixing and using must be carried on under a deep orange or pale ruby light, with these precautions strictly attended to there will be no cause for failure in the sensitizing.

The preparation of the sensitizer is as follows:

- (1) Distilled water, 8 ounces. Ammonio citrate of iron (green) 1 ounce.
- (2) Hot distilled water, 4 ounces. Citric acid (crystals) 1 ounce.
- (3) Hot distilled water, 4 ounces. Nitrate of silver, 1 ounce.

In stirring the mixtures, use nothing but a clean glass rod, or a clean strip; as soon as each ingredient is dissolved, add No. 2 to No. 1; shake up the mixture; now add No. 3 and shake the mixture thoroughly; stand it aside to cool, and when cold it is ready for use.

#### SENSITIZING THE PAPER.

This can be accomplished in two ways. The first plan is to lay the sheet of paper down upon a sheet of clean glass, and apply the sensitizer with a camel's hair brush, by pouring a small quantity of the sensitizer into a saucer; the camel's hair brush must be one of those with an india rubber back, not one with a metal back. The liquid is applied by brushing upon the paper very



THE PATH TO THE LAKE

R. E. WEEKS

(Second Prize, Snow Competition.)

lightly from end to end; it is then suspended in a darkened closet to dry, the temperature of which should be about 90 degrees F. When dry the paper is ready for use.

The second method of coating is conducted as follows: Take some light wood strips; coat them with shellac varnish, and dry; then cut the paper of a suitable width, say ten inches wide, and the length of the sheet as purchased; mark the back of the paper with a lead pencil, so that it may be easily seen under the orange or ruby light, then place one of the wood strips at the top of the paper upon the back, and clip it with three clips; follow this out at the bottom of the sheet, and so prepare a number of strips of paper; pour into a 10x12 clean tray (a porcelain tray is well suited for this) several ounces of the sensitizer; now take one of the sheets of paper, bend it like the letter J, allow the bend near the left hand to touch the liquid, raise the left hand, and allow the right hand to lower at the same rate that the left hand is raised; this will produce an even coating; pass the paper over the liquid twice in this manner, then drain off the excess of sensitizer from one corner of the paper into the tray, by allowing the draining corner to touch the side of the tray, then no air bubbles are formed; the coated paper must now be placed in a warm closet to dry; after drying it should receive a second coating, so as to produce an evenly sensitized surface; after drying the sheets of paper can be rolled up upon each other, or cut to size, and kept under pressure, until required for use.

The balance of the sensitizer may now be placed aside and kept for future use. This sensitizer will keep for months in good working condition.

#### PRINTING.

The use of this paper for printing requires the same care as platinum paper in manipulating it away from actinic light; place the paper upon the negative, and print to a moderate depth, the same as would be done with the collodion printing out papers; as soon as the prints are completed, place them one by one into a tray of clean water, and wash them well in about six changes, allowing a little time to elapse between each washing; now prepare the following toning bath from the platinum stock solution.

#### STOCK SOLUTION.

Chloro-platinite of potassium, 15 grains.

Syrupy phosphoric acid, 2 drachms.

Distilled water, 4 ounces.

Two drachms of this solution must be mixed with thirty ounces of water; the prints must be toned in this bath until the desired black color is acquired; the prints are then well washed, and fixed in a bath of hyposulphite of soda, measuring 18 on the hydrometer.

The prints must be changed repeatedly in the hypo bath, to insure all the traces of free nitrate of silver being dissolved out; ten minutes' time in the fixing solution will do this; all that is necessary after this will be to wash the prints well in running water for half an hour, when they may be dried and mounted in just the same way as platinotypes.

If the above operations are carried out carefully, the resultant prints cannot be distinguished from an ordinary print in platinum, and as to permanency, there cannot be any doubt but that these prints made with the salts of silver and iron, toned as they are with platinum, can claim an equal right to permanency with any prints that are made by the usual silver printing processes.

---

#### HINTS ON DEVELOPMENT.

Development with a developer that gives a bluish-black image should be carried further than with pyro, to obtain the same printing opacity.

In preparing developers for use in warm weather, it is advisable to either lower the amount of alkali given in the formula or double the quantity of water.

A good metol one-solution developer for snapshots is: Metol, 2 grs.; sulphite of soda, 22 grs.; carbonate of soda, 13 grs.; bromide of potash,  $\frac{3}{4}$  gr.; water, 1 oz.

A standard pyro-soda developer for normal exposures is: Pyro, 2 grs.; sulphite of soda, 12 grs.; carbonate of soda, 14 grs.; bromide of potash,  $\frac{1}{2}$  gr.; water, 1 oz.

As soon as the image has started developing, the plate is not nearly so sensitive to fogging by the dark-room light as it was before development commenced.



**SNOW AND MIST**

(Honorable Mention, Snow Competition.)

**J. H. FIELD**



**A HILLSIDE PATH**

(Honorable Mention, Snow Competition.)

**C. F. CLARKE**

## THE ART OF COLORING PHOTOGRAPHS.

BY JAMES C. SAVERY.

## Part Two—WORKING WITH WATER COLORS.

In the articles in the February number it was my purpose to present a coloring method by which any one unfamiliar with painting as an art, could utilize the various mineral colors now upon the market and produce good results. Briefly stated, this class of coloring is known as "wash painting," and while it is true that the majority of the so-called hand-colored photographs are wash-painted (because it is easier and requires less skill) still it has remained for the true artist to produce something finer; a picture that will give him credit for his knowledge as to the proper uses of water colors and the methods employed in their application.

Knowing that one's artistic tastes are apt to have led him into the two channels of artistic expression, water-colors and photography, it is my purpose in the following article to show how the combination of them is capable of producing results of great artistic merit.

It is therefore to the photographer who knows something of water-color painting in the ordinary acceptance of the term that I speak.

## TAKING THE PHOTOGRAPH.

If you intend to produce really artistic and well-appearing colored prints you must begin with that idea at the very start of the picture making process, namely the plate and its exposure.

I take for granted you well understand the fundamental rules of composition, proper exposure, development, etc., and I will only add a few hints in regard to these special stages of the work.

Select a subject that you think will color well, some quiet little woodland bit for an example, with soft, pretty foliage and marked variations of color. An orthochromatic plate for this purpose will be found the most satisfactory. Stop down the diaphragm and lengthen the exposure to ensure good detail. Try if possible, not to procure too dark shadows or extreme high lights, but work for half tones.

<div style="border: 1px solid black; padding: 10px; margin-bottom: 10px;"> <div style="display: flex; justify-content: space-around; margin-bottom: 5px;"> <span style="border: 1px solid black; padding: 2px 5px;">1</span> <span style="border: 1px solid black; padding: 2px 5px;">2</span> <span style="border: 1px solid black; padding: 2px 5px;">3</span> <span style="border: 1px solid black; padding: 2px 5px;">4</span> <span style="border: 1px solid black; padding: 2px 5px;">5</span> <span style="border: 1px solid black; padding: 2px 5px;">6</span> </div> <div style="border: 1px solid black; padding: 2px 5px; margin-left: 0;">7</div> </div>	<div style="border: 1px solid black; padding: 10px;"> <p><i>Subject New Jersey Farm</i></p> <hr/> <p><i>Exposure <math>\frac{1}{2}</math> sec. Stop f-8</i></p> <hr/> <p><i>Tree Trunks - 5 - 6</i></p> <p><i>Tree Foliage - 2 - 3 - 10</i></p> <p><i>Fallen Leaves - 4 - 2 - 3</i></p> <p><i>House - 9</i></p> <p><i>Roof - 13</i></p> <p><i>Sky tints - 6 (light) 5</i></p> <p><i>Etc, etc.</i></p> </div>
--	--



WINTER NIGHT

(Honorable Mention, Snow Competition.)

R. C. BORN

Before packing up your impedimenta and moving to the next place, jot down in a note book provided for the purpose, the color of the principal objects in your picture, such as sky tints, etc. If you wish to be more exacting in regard to procuring as near as possible the original colors of the subject the following method will be found extremely helpful and which the accompanying diagram serves to illustrate.

Let No. 1 and No. 2 be two leaves of your note-book, the first being the Color Reference: the second, a separate memorandum for each individual picture.

If one understands the mixing of colors the above method may be seen at a glance to facilitate long and cumbersome descriptions.

I advise the use of Pyro as a developing agent as it, without doubt, gives a better negative for platinum printing.

Develop for detail and *not* misty effects.

#### PRINTING.

A fine quality of platinum paper is to be preferred above all others for this class of coloring, as the texture of the paper most resembles that used in ordinary water-color work, and is capable of greater artistic results. A medium rough surface will be found more easy to work upon than a smoother grade.

*Print until the shade corresponds in depth to that of an ordinary uncolored photograph.* Many make the mistake of thinking a print should be lighter in tone.



After completing this operation and having procured a print which you think will color well, the next things to consider are the:

#### NECESSARY MATERIALS.

An ordinary wooden drawing board, four thumb tacks, a box of good water colors, a magnifying glass (for painting fine detail) a porcelain compartment palette and a glass of clear water will complete the equipment.

With your print (untrimmed) carefully tacked upon the board (it is a good plan to have a blotter between) you are now ready with the help of your color memoranda to begin

#### APPLYING THE COLOR.

Before doing this let me caution you to bear in mind the following facts as you work:

Determine the source of light by the shadows and manipulate your colors accordingly.

Do not make the mistake of preparing thin washes and merely brushing over the different objects in the picture. For certain kinds of paint this method is all right, but with water colors you must use the colors in their *full* strength and apply them with the same amount of skill and dexterity as if working upon a *plain, white piece of paper!* The print must act merely as a *suggestion* as to where the color shading must go.

*Please bear the foregoing paragraph well in mind; IT IS THE MOST IMPORTANT OF ALL!*

Do not brush over the same surface more than is absolutely necessary if you desire your print not to look "mealy."

Keep the mixing water in the glass as clean as possible, thus insuring brilliancy of color tones.

Don't hurry matters by trying to get "sketch effects." Sketchy painting, unless done upon a print especially in keeping, is anything but pleasing.

Pay strict attention to distances and try to vary your color shades so as to render the proper effect of "atmosphere."

With these "don'ts" well in mind, you may now apply your colors.

The first thing to be considered in coloring any landscape is the sky. Beginning at the horizon (brushing over all things that rise before it) carefully blend the proper tints. Now work in the picture proper and relieve the too dark shadows with Chinese white.

In sunset effects always add a small amount of the predominant sky color to the strongest of your high lights, thus rendering greater harmony of color.

There is perhaps nothing that is so valuable to the colorist as Chinese white for giving brilliancy and snap to a picture. In snow scenes it will be found extremely effective if a little is applied here and there, the result being a delicate shimmer. A line or two upon a clear expanse of water will also prove an added touch of beauty to any marine. Now a few words in regard to

#### DETAIL.

While it is most essential to devote your best time and care in the working in of fine detail, do not make the mistake of grouping too much together. Two or three small but nicely colored wild flowers along a hedge fence are infinitely more pleasing than innumerable tiny spots of various colors scattered promiscuously over a great area. In short what detail you do color, *do it well* and do not have it "spotty."



FOREST HOME WALK  
(Honorable Mention, Snow Competition.)

H. G. DORSEY



WINTER

A. D. MOORE

Masses of green appearing in the immediate foreground, can be effectively relieved by a few short perpendicular strokes of lighter green mixed with Chinese white, giving a suggestion of grass blades.

#### MOUNTING.

After a print has been colored it will quite likely have a tendency to curl. This can easily be overcome by taking a moderately hot sad iron and ironing the print face down until flat.

It can then be mounted on a white, plate marked (embossed) card, by merely touching the two upper corners with a strong paste. To insure the print lying perfectly flat after this operation, place a piece of paper over the print and hold the iron on the pasted corner until dry.

With a picture of this sort it is customary to place the title and your written signature, using an ordinary lead pencil, just beneath the print, although this is purely a matter of taste.

In conclusion I can only add that you keep your eyes open for all high class colored platinum prints, and study carefully as to how the color has been applied. This you will find will help you greatly.

A few photographers, who are also watercolorists are, in various parts of the country, devoting all their time to this branch of picture making and furthermore are commanding flattering prices for hand colored prints that are difficult to distinguish from genuine watercolors.



SNOW SHADOWS

C. F. CLARKE

## SNAP SHOTS AT SNOW LANDSCAPES.

By JERE MONTAGUE.

Volumes have been written relating to photographing snow scenes. Of course the ideal outfit for winter work is a 5 x 7 or 8 x 10 view camera, non-halation orthochromatic plate backed with some sort of non-halation composition or black paper, and a ray-filter. This sounds somewhat formidable to the ambitious amateur who wishes to sally forth with his hand-camera at the first fall of snow! It is to that same amateur who possibly is not equipped with the above list of articles that I wish to say a word.

Snow scenes, and good ones too, may be taken with almost any kind of a photographic outfit which one possesses. When the first fall of snow has ceased, take your hand-camera and go forth. You may live in the country: so much the better: for you then have nature's robe unsoiled by city dirt. If you are not so fortunate photographically, to live out of town, go to any of the city parks; there you will find views of sufficient beauty to repay you for your journey.

If your camera is equipped with film, so much the better. I am fully convinced that for snow scenes films are the equal of, if not superior to, any form of plates. If you are using plates, the non-halation orthochromatic is best.

Let us suppose that during the night a fairly heavy snow fall has occurred. The next morning is cloudy and the weather is moderating just enough to make the snow cling to everything it has fallen upon. We take our hand-camera and start out. In snow work, you must remember that on account of the reflection it will be necessary to stop down your lens one or sometimes two stops smaller



JERE MONTAGUE

than the stop with which you usually work. For instance, if you are in the habit of using an  $f/8$  opening, stop your lens down to  $f/11$  or  $f/16$ , when taking a snow snap. This is especially so if your shutter is of the one-speed type.

We have arrived, let us say, at the park's entrance, and following a little path to the right, find ourselves in a position from which snap 1 was taken.

Notice the "old man of the mountain" effect of the sharp jagged rock in the mid foreground; see how quaint he looks with his cap of snow. Notice how the wet snow clings to the knots on the large tree trunk to the right. This snap was taken with a hand-camera using films, stop  $f/11$ , 1-25 second, 10 a. m., cloudy, light rain falling.

Snap 2 was taken the same morning with like conditions of light and time.



IN THE PARK

WILLIAM BURTON

11 of 11



WINTER

ALICE LANGDON COBURN

047011

One may see how this fir tree is loaded down with the weight of heavy wet snow upon its branches. The day after the above two photographs were taken, the weather cleared, a bright sun shone, and the temperature became lower. Once more we took our camera and about 10 a. m. wandered to the park. Just as we entered a side gate, we were confronted by three small tiers of stone steps which are shown in Snap 3. In this picture, you can see by the shadows that a bright sun is shining; our lens is therefore stopped down to  $f/16$ , and  $1/75$  of a second is given. If we had used the same stop and given the same time to this snap as we did yesterday, our film would have been greatly over-exposed.

As we walked around the edge of a small frozen pond, an old tree presented itself, as is shown in Snap 4. One can see that the sun has not yet melted the snow covering part of the trunk and one or two large branches. This picture was taken with  $f/11$ , and  $1/50$  of a second.

As we emerged from this thickly wooded part of the park we came out upon a broad expanse of shining, glistening snow; in the rear foreground (Snap 5) you see a small pine tree casting its sharply defined shadow: also three foot-prints which have been nearly covered by the drifting snow. The central figure of this composition is a stately pine tree whose drooping branches have not quite recovered from the strain of the weight of snow. In taking this snap our lens was stopped down to  $f/22$ , and  $1/75$  of a second given, on account of the large expanse of glistening snow.

My belief is that the best and most rational development for films consists in the tank method. The best effect is produced in these small snow scenes, by printing them upon glossy black and white paper, and mounting them on either a white or dark gray mount.

We see then that even though you do not possess a costly and complicated photographic apparatus, you may still obtain snow scenes which will adequately grace the interior of a hand-camera album.

---

## • HINTS TO BEGINNERS.—DEVELOPMENT.

By BURTON H. ALLBEE.

Development and exposure must complement each other, else the balance of light and shade in the negative will be lost and the tone values will be untrue or distorted. The beginner's principal mistake is under exposure. He follows this by over development in his effort to bring out the more or less obscure image on the plate. The result is a negative that prints with black and white patches, a congeries of violent contrasts. Instead of the delicate gradation from one tone to another, one sees a violent jump from black to white, or white to black. With gradation lost, the beauty of the picture is destroyed and the negative is worthless, except as an example of what not to do.

Proper development is dependent upon proper exposure. Under exposure is always wrong. It is never justifiable. Either a picture is worth the care and attention it requires to make it right or it isn't worth making at all. It cannot be too strongly impressed upon the beginner that it all has its origin in proper exposure. After that in proper development. But one is impossible without the other, hence exposure should be studied carefully and with the right idea in mind. Otherwise, early experiments will be failures.

Assuming that the beginner has been out and has obtained several exposures



which are approximately correct—(even experienced amateurs frequently misjudge exposures and fail to obtain what they want, therefore the beginner need not be discouraged if his first attempts are failures)—but, if he has secured several which approach correctness, he is ready for development.

Not every amateur has a dark room where he can work at any time. Possibly it might be folly for him to fit up one until he learns whether he is going to follow the elusive hobby long enough to make it worth while, but he should remember that every amateur has a dark room at night. The kitchen sink or table makes an admirable dark room operating table. For a light he can buy one of the cheap red lamps, or he can do as I did, make two sheets of post-office paper into a cylinder and place it over an ordinary kerosene lamp. There will be a circle of white light on the ceiling, but I never found that it injured the plates in the least. The expense will be limited to a nickel.

After an amateur has been at work long enough to understand developers he can select his own and stick to it; but, as a rule, it is best to follow the directions of the plate maker with one exception, and that is very important. When I began using a plate camera, no one told me any of the little wrinkles for controlling development. I followed the plate makers' directions absolutely. The result was several dozens of perfectly black plates, and scarcely a good negative among them. One day an amateur whispered to me something about the saving grace of bromide, and I found that I succeeded in getting now and then a good negative. Another told me how to reduce my developer. That settled it. Since then I have been as fortunate with my plates as anybody.

I take the developer recommended by the maker of the plates, whatever they may be, mix it according to directions and reduce it about one-half, unless I have given unusually long exposures, then I dilute it with a volume of water equal to the volume of the developer and put in a considerable quantity of bromide. It is perfectly safe to recommend this, for substantially all makers of plates have a pyro formula; and after all, pyro is the best developer for plates that has ever been discovered. It is dirty and has a tendency to stain, but if one undertakes photography with the idea that there is nothing unpleasant about it, that it requires no disagreeable operations, then he better leave it at once. One is sometimes strongly tempted to believe that the actual enjoyment is in exact ratio to the disagreeable work that must go with it in many instances. However, a little pyro stain won't hurt one and the compensation comes when the beautiful negatives are dried ready for printing.

If one dilutes his developer he can give a long exposure. If he uses it full strength, he must give a short exposure. The formulae are compounded to give quick results. Much of the so-called speed of the plate is frequently in the developer. Therefore, the dilution assists one in securing a plate that develops slowly and will yield, when finished, a print containing all the delicate half-tones that make the original seem so pleasing. The plates will be thin and will print quickly, but there is no harm in that and they will, at least, be free from the chalk and soot appearance of the underexposed and overdeveloped plates of a majority of beginners.

How long shall a plate be developed? It is impossible to say. Each variety of plate varies somewhat from every other. Even plates in the same box will vary when exposures are exactly the same. I follow the old rule that the appearance of the high lights on the back of the plate affords an approximate indication of sufficient development. The high lights must barely show. If continued after they are visible, the next tones which are the beginning of the

gradation will be developed down to the plate, too, and will become high lights. On the other hand, if the high lights do not show on the back of the plate, they are likely to print as half-tones and the resulting picture will have only a part of the scale.

The efficacy of this rule is vigorously denied, but there is good authority for following it, at least until something better is devised.

Perhaps there will be no harm in alluding to tank development. For business purposes, tank development has its advantages, and if I were a professional, earning my living making pictures, I would certainly use the tank method of developing. But where one makes pictures for sport, tank development robs the pursuit of half its pleasure. The appearance and gradual building up of the image in the solution is one of the most fascinating portions of the art, and I would not resort to tank development unless compelled to do so. I want all the pleasure there is in the game, and the development of the negative is one of the keenest of the many pleasures which pertain to picture making.

These suggestions are at variance with those usually offered, but I have succeeded in making passable pictures for several years by this method. I haven't made prize winners; I am too busy about my regular business to do that, but I have hundreds of beautiful prints, including many records which cannot be replaced and which I would not exchange for all the prize winners ever hung in exhibitions. It is perfectly legitimate to attempt to make prize winners, but it is unwise to neglect the homely, but none the less beautiful, pictures, for ourselves and our friends, which are everywhere around us. Acquire the highest degree of technical skill possible. Make as good pictures as you can. But do not think that the whole of picture making is contained in the prize prints which are hung in the exhibitions.

I seldom doctor my negatives. I find that developing in dilute developer, following liberal exposure, will yield negatives which require comparatively little doctoring. I find that I scarcely ever have to retouch a portrait. The thin negative, full of detail, though soft, will yield prints which are artistic and technically good. Doctoring and retouching are alike largely unnecessary.

These simple suggestions will enable almost any beginner to succeed where now he fails. Expose liberally and dilute your developer. Those two features are important elements in the finished picture. They virtually control the result, and both are so easy of accomplishment that the veriest tyro need not fail in following these directions.

---

## Editorial Notes.

In reply to numerous inquirers, we will explain that former subscribers to *CAMERA AND DARK ROOM* will receive the combined magazine until the end of their subscription without any extra cost. Renewals, however, must be accompanied with the full amount of \$1.50, the present subscription rate. Those who were formerly subscribers to both magazines have had their period of subscription extended accordingly.

\* \* \*

At the recent Arts and Crafts exhibition in Boston, in a remote corner of the hall, half hidden by decorative screens and bulky furniture, was a collection of photographs. Some of these were by Boston professionals who are graduates

from the ranks of the amateurs, others by those who photograph only for the love of it. Undoubtedly all were made by men and women with aspirations to artistic achievement, but we can but confess, though mournfully, that these photographs neither received nor were worthy of receiving any large amount of attention in comparison with the works of some of the crafts which do not even aspire to the rank of a minor art. Yet photography aims to replace painting as the art preservative.

What was true here is true of ninety-nine hundredths of all the photographs launched upon a defenceless world. Compared with the work of designers, painters and even craftsmen in metal and glass, the majority of all photographs exhibited show an artistic weakness, a lack of creative and imaginative faculty, which is positively painful. The dearth of ideas is serious. Let one photographer create a decorative *motif*, such as the use of a crystal ball, the grouping of figures in an open door, and straightway hundreds follow in his footsteps. "The Path to the Sheep Pasture" revealed the beauty of tumbled snow, and the value of a simple curved line in a flat plane for directing attention; to-day it has become a tradition of snow photography that one must trample in the snow to break the monotony of the foreground. In 1902 the medal of the Royal Photographic Society of England was awarded to a small 4 x 5 platinum print called "Seven Pines." The print was so small and simple that the critics were amazed at the award, which was possibly made for the originality of the idea. The next year we find in the press such a comment as this: "This print has practically the same subject and arrangement as the famous Seven Pines of last year, but is far superior in its rendering of snow." The maker of the original picture has never since produced anything resembling the print, but there have been exhibited year by year since then, both in England and America, a series of variations of the same idea.

What is the cause of this travelling in a rut? It can be analyzed as lack of training in art. Partially it is due to lack of observation, of the power to see the beauties of nature through the artistic imagination, but this also is nothing but lack of artistic training. The artist sees new and original beauties wherever he goes, because he has been trained to observe. He is continually looking at whatever he sees with the idea, "How can I turn that into paint?" or line, as the case may be. He paints or draws something, and throws it away. He does it over again the next day and paints it out. After he has done it some hundred or two of times, he begins to feel that he is learning how to do it, and some day he paints a picture. When he does he knows his subject and he knows his technique. He confines his thought to the expression of the idea in mind and succeeds.

The photographer goes out and sees a pretty subject. He guesses at the exposure and snaps it. Then he develops it, finds it not correctly exposed, and attempts to modify the developer to correct his fundamental error. After he has the negative, he must do some work on it, general intensification, local reduction, what not. He makes a proof. The result is unsatisfactory. He makes an enlarged negative, backs it with tissue paper or ground glass substitute, works on it with graphite and a stump, prints it with chromatised gum and develops it with sawdust soup and a badger brush. The result hangs in a salon. Is it art? Can any man produce art by a process where he starts out without any idea but a chance sensation and modifies it twenty times in the making?

Of course not all photographers can be thus described. There are photo-

graphers who are artists, who have studied the principles of art, who have trained their faculty of observation to see and hold the tricks of light, the values of colors, the beauties of line which are so profuse in nature. They have painfully acquired the knowledge of technique so that they can copy a photograph, produce an enlarged negative or a solio print, or make three color prints with equal success. There are not many of them, and their names are known the world over among photographers. They are the men who create, who make the pictures which the rank and file cannot understand and hence call photographic lies, who are vehemently criticised and ardently hated by the men who work with  $f/32$  and a magnifying focuser.

The men who will be successful in photography, who will raise it above the level of a mechanical craft, slowly but surely, are the men who will give it their lives, as the artist painter does, who will drop the thought of gain; make photographs because they love beauty; make photographs and photographs and photographs, and never let the world see them; drink in the great art of the world, not to copy it, but to absorb it, to make it part of brain and heart and finger, so that it will come out through the travail of rebirth, transmogrified, bettered and beautified by new knowledge and appreciation and imagination, the heritage of the past transformed into the model of the future.

Thus must the photographer labor after knowledge. But having by very bitter travail achieved it, what shall the artist photographer of the future portray? Photography to-day shows us a cold gray world of littleness and literalness and petty arrangements decorative. Wide-thrown tree boughs, symbolic damsels, space-filling prettinesses and pettinesses will not suffice to make art. The province of painting is the portrayal of human emotion. Photography must do as much. The epic scenes of history are not beyond the painter, the beauty of holiness, the supreme agony of heroic death. Never can photography climb the heights long ago won by painting, but it can win its way far beyond what we now imagine. The road can be seen. Steichen has gone far with single figures, as "In Memoriam"; Herzog has disclosed a path he has not trodden, for his groups are not epic, but merely decorative; Pichier opens a vista to the imagination which he is far too feeble to conquer. The future of photography belongs to the man who will master his technique as the painters know his media, who will transfer the idea of his imagination to the paper with firm and undelaying skill, who will infuse his instruments with his own enthusiasm and bend them to his idea so that they live it before the camera, and who shall have the imagination to know and transcribe all the joys and struggles, all the sorrows and achievements of humanity.

\* \* \*

## INTERNATIONAL PHOTOGRAPHIC ART AND PICTURE POST CARD SHOW.

All of the Great Departments of Craft and Commerce, save the Photographic Arts, have had successful exhibitions, in which their development and progress has been shown. Never in America has this Craft made a comprehensive and full exhibition of its best processes and products. As soon as the management made the first announcement of such an exhibition it was greeted with high endorsement from the greatest photographic artists in this country and abroad.

After very careful and anxious consideration, and consultation with various

sections of the art and trade, it has been decided to hold this Great Exhibition in 1907, and the Managers have been fortunate in securing the First Regiment Armory, Chicago, for the second week in August. This date will enable those attending the Convention at Dayton, Ohio, to take advantage of this show, as a special train will be arranged for this purpose.

The management is, from correspondence and promises of support received, fully satisfied that this show will, from the number of applications for space already to hand, in every way surpass in extent and variety any artistic display yet made. The committees are maturing their plans well in advance, in order that all branches of the craft may be adequately represented.

To secure this desirable end, a close and persistent canvassing of all branches of the profession and craft and varied industries will be commenced at once, and reports of progress will be made from time to time in the Trade and Craft Press generally.

MR. CLARENCE JAMES VAN DEVENTER, President, Photographers Association of America, will occupy the position of Chairman of the Advisory Board; Mr. I. W. TABER will occupy the position of Vice-Chairman; and the list of influential Patrons, as well as the Advisory Board of one hundred and fifty members, is one of the most representative ever nominated.

It is the intention to make this Show cover all Departments and lines of the Craft.

In addition to the Trade Exhibitions proper, there will be special sections devoted to each line of Photography—Professional and Amateur.

Arrangements will be made as far as possible with the various Railroad Companies for excursion rates from all parts of the country.

The actual work on this Exhibition has been opened up early so as to have the longest possible time in which to secure all the craft and trade assistance available, and it will be carried through with great spirit, energy and completeness.

The Advisory Board is open to receive suggestions likely to add to the attractiveness of the Exhibit as a whole.

Applications for space have been received from many of the greatest firms, and the resources of the army will doubtless be severely taxed for the Exhibition and the resources of the armory will doubtless be severely taxed for the Exhibition.

Intending Exhibitors will greatly assist us in making arrangements for this Exhibition by informing us as early as possible of their probable requirements, as from present indications space will be limited.

The price for space is one dollar per square foot. Arrangements can be made in contracts for the use of booths, all ready constructed. Write at once for plats, etc.

Gold, Silver and Bronze Medals together with Diplomas of Merit, will be awarded in each section and classification. The great Amateur Exhibition, in which is offered \$100 in gold as first prize, \$50 in gold as second prize and \$25 in gold as third prize, will be a wonderfully interesting display.

The Picture Post Card Section, in which will be exhibited the collections and samples—both Trade and Amateur—will constitute one of the greatest displays of Picture Post cards ever assembled in one place.

In the Amateur Section, \$100 in gold, \$50 in gold, \$25 in gold, is offered as 1st, 2nd and 3rd prize for 1st, 2nd and 3rd best collection of Post Cards exhibited.

Plans, entry forms, and all particulars may be had of, and all communications are requested to be addressed to,

HENRY WALTER T. TIERMAN,  
GEORGE STUART HILL,  
JOHN DE. P. HILTON,

Organization Offices: 3600 Michigan Boulevard, CHICAGO, U. S. A.  
*Organizing Managers*

Long Distance Telephone: Douglas 2517

### GREAT POSTER DESIGN CONTEST.

\$150 in gold is offered in prizes in this contest for the most artistic and comprehensive design, typifying *The Photographic Arts*, for the official poster of this show. Theme and colors entirely at artists suggestion. First prize, \$75.00; second prize, \$50.00; third prize, \$25.00. Send design for entry early—No conditions, this is a Free For All Contest.

---

---

### THE SNOW COMPETITION.

FRANK R. FRAPRIE.

Again this month we have to chronicle the receipt of a large number of most excellent pictures for our monthly competition. Among them are a number of new competitors, one of whom has won the first prize. We hope that each of our readers will feel himself or herself especially invited to enter these competitions, and will send prints from month to month. Prints which do not receive honorable mention will be criticised in "Our Portfolio" if the senders so request.

In deference to a request expressed by several readers, we publish this month a list of the subjects chosen for several months ahead, in order to give plenty of opportunity for prints to be made from negatives on hand, or for new pictures to be made. We shall endeavor to print as far as possible articles bearing on the subject set for the month, in each future number.

The medals awarded in the last three competitions, together with those given this month, are now being engraved with the names of the winners, and will be forwarded at once on completion. We find it more advantageous to have several done at one time, and contestants will therefore bear in mind that the medals may not be mailed them at once after they have been awarded.

The picture to which the first prize is awarded this month bears the title of "Loneliness," and is by A. D. Moore. This print is decorative to a very high degree, and also possesses a most beautiful atmospheric quality. The foreground is simple, but relieved from monotony by the various tracks and shadows which break its surface. The picture is impressionistic in the highest degree, and hence defies analysis. The fine quality is well kept in the reproduction. The same maker also sent in "Winter," which we have reproduced. This is no less charming than the other print, but is a much more usual composition. It is absolutely truthful in values, in sky, water and snow, and offers a useful object lesson

to those who think that the truth rendering of snow values requires such short exposure as to render all tree trunks in inky black.

The second prize was awarded to R. E. Weeks for "The Path to the Lake." Here again the chief charms are simplicity and atmosphere. Possibly some may take exception to the composition, which is certainly not academic. Success always justifies the unusual, however, and the print is certainly a success. Other prints submitted by the same maker were interesting, but are not reproduced because so similar to the prize picture.

We also reproduce a number of pictures which were awarded honorable mention. No distinction of merit is implied by the order in which they are criticised, which is haphazard. "Winter Night," by R. C. Born, a picture entered for an earlier competition, is an excellent rendering of night, strong in its very restraint. A glaring arc light upon fresh snow often tempts to the exposure of a plate, but the quiet peace and homeliness of this subject is rarely attempted. The sky seems rather dark in comparison with the snow, suggesting that the latter is illuminated by some unexplained source of light, always a defect in a picture, and the highlights on the path seem far stronger than can be logically explained, but as they help out the composition, the end may be held to justify the means.

C. F. Clarke is awarded honorable mention for two of his studies of trees and their shadows on snow, of which we have had the pleasure of seeing a series. Both are simple and straightforward, true in value, and pleasing in quality. They show that the maker is a master of technique under the most difficult circumstances.

"SNOW AND MIST," by J. H. Field, is one of the pictures of which no one who knows American photography could mistake the maker. Mr. Field loves the various aspects of outdoor nature under what most of us are prone to regard as unfavorable auspices, and takes pleasure in recording them, with uniform success. Our principal criticism is that the empty space in the centre is rather too strong a separation of the elements of the composition.

"FOREST HOME WALK," by H. G. Dorsey, is a technical feat rather than a true picture. Snow-laden trees contain always an element of the picturesque, but the path straight through the centre of the picture, and the ungainly fence, both detract from the final result. The picture is nevertheless awarded an honorable mention.

The original of "IN THE PARK," by William Burton, is as brilliant a piece of lens work as has ever fallen under the writer's observation, but also is of technical rather than artistic excellence. The composition is too symmetrical, and the exposure made solely for the snow, insufficient for the darker parts of the picture. This the engraver has partially remedied, with concomitant sacrifice of the microscopic sharpness of the original, but enough remains to show with what fidelity snow structure has been rendered.

Other snow pictures reproduced in this number were not entered for competition, and hence we are not at liberty to criticise them, but our readers will doubtless be able to form sound opinions of their own, possibly more valuable than those we would give them.

Prints for future competitions are solicited from any reader, whether or not a subscriber to the AMERICAN AMATEUR PHOTOGRAPHER. They should be sent by mail or express, fully prepaid, to Frank R. Fraprie, 6 Beacon St., Boston, Mass., to arrive on or before the date set for closing the contest. In case the magazine is delayed in mailing, prints sent from any point in the United

States immediately after its receipt, will be given consideration for the next contest, even if they arrive a day or two after the closing date. Prints for these competitions *must not* be sent to the New York office, as they are likely not to be received by the judges in time for consideration.

First and second prizes will be awarded a bronze medal in each case, with blue ribbon and silver bar, and red ribbon and bronze bar, respectively. The first award includes also a cash prize of five dollars. Honorable mention may be given to meritorious pictures which do not attain prize rank. Awards may be withheld or divided at the discretion of the judges. Pictures awarded prizes or honorable mention may be reproduced, and unsuccessful pictures will be returned if requested.

The subject proposed for March is "Photographic Postcards." The prize will be given to the most artistic and carefully made set of three postcards printed on gaslight, bromide, platinum or collodion paper. Neatness is essential. Closes April 1.

For April, Flowers. Closes May 1. For May, Landscapes. For June, Instantaneous Pictures. For July, Pinhole Pictures. For August, Animals. For September, Marines, including Views of the Sea or Great Lakes, Shipping, Yachts and Harbor Scenes. For October, Mountains. For November, Atmospheric Effects, including Fog, Mist, Rainy or Snowy Days, Rainbows, Sun-dogs, Clouds, etc. For December, Genre. For January, Portraits. For February, Snow Scenes.

---

## Readers' Contribution Box.

### TWEEZERS FOR MANIPULATION OF PHOTOGRAPHIC PAPER.

A single strip of hard rubber ten inches long makes an excellent pair of tweezers for handling photographic paper. Bend in the middle by holding in the steam of a rapidly boiling teakettle and bevel both ends on the outside for half an inch. Rubber an eighth of an inch thick seems to be the best thickness, as it has just about the desired spring. All edges are of course made very smooth by sand papering, and the paper may be safely grasped by one corner. Each instrument is marked by scratching an abbreviation on it, such as Dev. for developer, and each one is always used for the same chemical. Thus there is never any danger of carrying traces of any chemical beyond its proper place, supposing, of course, that one has trays which he always devotes to the same chemical each time. With a set of these tweezers I can finish a large batch of prints without soiling my hands, simply keeping each tweezer beside its corresponding dish and dropping the print carefully into the next dish. Besides the gain in time from not being obliged to wash and dry my hands many times, I also find a decided gain in feeling sure that my hands are being neither poisoned, chapped nor stained.

MRS. E. D. GRIFFIN.



## THE BALLADE OF THE GUMMIST.

A pallid face and a fishy eye;  
 A mien betokening deep despair;  
 Clothing corroded with alkali  
 And frescoed over with pigments fair;  
 Chunks of the same in his tousled hair—  
 "Some kalsominer a prey to rum!"  
 You say? Ah, no, you're in error there;  
 He is the fellow that works in gum!

His conversation, should you stand by,  
 Is "broad and sketchy," and somewhat bare;  
 Ideas suppressed do but signify  
 Details suppressed in the "studies" rare  
 Evolved by him—but his weighty air  
 As he speaks strikes all who hear him dumb;  
 Dispute, Rash Listener, if you dare!  
 He is the fellow that works in gum.

*Sed loquitur*—"If you multiply  
 The colloid factor you must beware!  
 If you use Lalanne you must rectify.  
 With a badger blender, the faults that e'er  
 Obtrude themselves, for despite your care  
 Mucilaginous striae are wont to come,  
 And these will the notan of tones impair."  
 (He is the fellow that works in gum!)

But we, impotent, can only stare,  
 And wonder whether his prints are bum,  
 Or fruits of Genius beyond compare;  
 While we mentally vow to refrain from gum.

\* \* \*

## RAMBLINGS.

No, I'm not going to tell you how to make enlargements in the family bath-room or give the formula of a new "universal" developer. I am simply going to relate a few of the "wrinkles" that a somewhat varied photographic experience has taught me.

Last summer I took a driving trip thro' a somewhat sparsely settled portion of California in company with an old school-mate. We were both armed to the teeth, our battery consisting of my trusty 8x10, and a pocket kodak for quick work, and my friend's smaller but none the less deadly 4x5, supplemented by numerous plate holders and film cartridges.

After a day's drive up the beautiful Russian River valley, where the scenery is irresistible to any disciple of the camera, we found our plates nearly all exposed and began to speculate as to where and how we should reload our holders.

Somewhat after dusk we arrived at ————. We found the hotel

without difficulty, because as a teamster we inquired of, told us "it was the only two-story building in town."

Supper being disposed of we sallied out to find a dark room, but imagine our dismay at finding that the place boasted of no photo gallery, and the only drug store no dark room, so back to the hotel we went and proceeded to enlist the landlady's sympathy. She showed us a little closet under the stairway and offered to hold the door shut while we changed plates. That closet was certainly dark, it was also piled full of trunks and winter overcoats, and altogether a very cozy place to spend a stifling July evening. But in we went with our holders and plate boxes, and the landlady braced her broad back against the door, cutting off even the ventilation that the key-hole might have afforded us. After fifteen minutes fumbling in that oven-like closet we awoke the landlady and begged to be let out. We were both anxious to develop a couple of plates, and altho' I had several tubes of prepared developer in my pocket, we had neither hypo nor tray. For the hypo we substituted cyanide of potassium, which we succeeded in purchasing of the local druggist after solemnly assuring him that we were not contemplating suicide.

We next interviewed the greasy Celestial who presided over the hotel kitchen, and endeavored to borrow one of his cake tins to develop in, but the heartless heathen flatly refused, and I was about to give up when my friend smiled a wise smile and told me to get the developer ready and he would furnish the tray. In a few moments he returned to our room bringing a shallow paste-board box, a long handled tin dipper and a paraffine candle. I don't know to this day how he got them, and presume he doesn't care to tell. But the rest was easy. While I mixed the developer in the water tumbler he cut up the candle, melted it over the kerosene lamp in the dipper and converted that box into a water-tight tray. Tray and developer now ready, we had to contrive a ruby light. For this we secured some red and yellow wrapping paper. These were placed together, then pinned into a cylindrical form and set down over the stub end of the candle, making an effective light.

I presume that the table spread was spotted and that the landlady called us names; but what did that matter? We developed our plates and demonstrated that dark-room and running water are not essential.

B. W. ADAMS,  
Napa, Calif.

---

## MAKING UP SOLUTIONS.

### DIFFICULTIES THAT ARISE IN PHOTOGRAPHIC PROCEDURE AND PRACTICE ANTICIPATED AND EXPLAINED.

Judging by the number of enquiries as to the meaning of such terms as "saturated solution," "10 per cent. solution," and so on, and the difficulties correspondents appear to have in comparing one formula with another, the compounding of solutions is a very perplexing point of practice. No doubt much of the difficulty arises in many instances from a lack of the more convenient forms of apparatus, and from the fact that the weights and measures tables used have been practically forgotten through unfamiliarity with them since one's school days.

## WEIGHTS AND FLUID MEASURE.

The tables needed for ordinary work are, after all, very simple. Formulæ are made up by apothecaries' weight, and it is quite sufficient to bear in mind that—

20 grains .....	equal .....	1 scruple.
3 scruples .....	" .....	1 drachm.
8 drachms .....	" .....	1 ounce,

this giving a total for 480 grs. to the ounce. As most chemicals are bought by avoirdupois weight, it must be remembered that an ounce avoirdupois contains  $437\frac{1}{2}$  grs. The fluid ounce is divided into 8 drs., and each fluid drachm into 60 minims. For mixing large quantities of solution, such as fixing baths, it is often convenient to use ordinary household vessels. The average size tumbler holds 10 fluid ounces or half a pint. The old school boy rhyme, "a pint of water weighs a pound and a quarter," helps to remind one that 20 fluid ounces go to the pint.

## CONVENIENT APPARATUS.

In most households there is to be found an ordinary pair of scales capable of weighing from an ounce up to six or seven pounds. It will, however, be necessary to have a small balance weighing down to a grain or two, and if this can be arranged so as to leave both hands free, so much the better. A minimum graduate, 4 oz. and 10 oz. measure glasses, and a couple of stirring rods, a glass funnel, and a few Swedish filter papers, are all practically essential, while a small mortar and pestle will be found very convenient and time saving.

## PERCENTAGE SOLUTIONS.

"A 5 per cent. solution of alum." What does that mean, and how is it to be made up? It means that 5 per cent. of the solution is actually alum, and the remaining 95 per cent. is water. Let us assume that 10 ozs. of the solution is required. Five per cent. is a twentieth, and a twentieth of 10 ozs. is  $\frac{1}{2}$  oz. We weigh out  $\frac{1}{2}$  oz. of the powdered alum accordingly, and placing this in the large measure glass fill up to the 10 ozs. mark exactly with water. When, after stirring, the alum is dissolved, we have our 5 per cent. solution. If a 10 per cent. solution of ammonia .880 is required, the procedure is the same, 1 oz. to the liquor ammonia being measured into the glass, and water added up to the 10 ozs. mark. Five and 10 per cent. solutions are the most convenient to make, the dissolved substance being a tenth or a twentieth of the total bulk. It is seldom that other strengths are required in everyday photographic work.

## ADVANTAGE OF TEN PER CENT. SOLUTIONS.

It will have been noticed that there is a correspondence between the apothecaries' weight and the fluid measure, 480 grs. in the one case and 480 minims in the other going to the ounce. This enables the number of grains per ounce or per drachm of any 10 per cent. solution to be arrived at at once. Take, as an example, the use of a pyro developer, when a stock pyro solution of 10 per cent. strength is being employed. It is often convenient and usually sufficient to state that a 2 grs. developer was used for certain work, with, say, no bromide of potassium. Now if 120 minims of the 10 per cent. stock pyro were taken and added to 6 ozs. of water, we should have such a 2 grs. developer. The 120 minims of stock solution contain 12 grs. (i.e., *one tenth*) of actual pyrogallol, and 12 grs. distributed over 6 ozs. of water gives a strength of 2 grs. per ounce.

To make up 4 ozs. of a 4 grs. developer we should need 16 grs. of pyrogallol which would be contained in 160 minims of the 10 per cent. solution.

#### SATURATED SOLUTIONS.

The term "saturated solution" is almost self-explanatory, and yet it seems to be only occasionally understood. Tea drinkers take various quantities of sugar or none at all. One lump is an average, but most of us know the school boy who likes seven or eight, and whose cup always has a layer of undissolved sugar at the bottom in spite of his constant stirring. His tea is a saturated solution of sugar. The fluid has dissolved as much as it is capable of dissolving. It can take up no more, hence its saturation. The simplest way of making a saturated solution is to have considerably more of the salt in the bottle than the water can dissolve so that some crystals always remain at the bottom. It must not be assumed, however, that the existence of undissolved crystals is an indication of saturation, for the lower portion of the contents of the bottle may be saturated while the upper portion is in reality a quite weak solution. The more of a substance is dissolved, the greater the density or weight of the fluid, and so it remains at the bottom. For this reason constant stirring hastens the solution of a salt, as it keeps the density of the fluid even.

#### THE QUESTION OF TEMPERATURE

must be considered when specifying saturated solutions. Take the saturated solution of oxalic acid given in some of the formulæ for vanadium toning of bromide prints, and by making such a solution at temperatures ranging from 45 degrees Fah. to 65 degrees Fah. very great differences in strength will result. Yet such variations in the temperature of tap water might easily occur. Unless distinctly stated it is well to assume that the temperature for a saturated solution should be 60 degrees Fah.

#### DISSOLVING THE SALTS

in the proper order frequently makes all the difference between an effective solution and one which will neither keep nor work well. With most developers it is essential that the preservative should be first dissolved in part of the water, the pyro or amidol being added to the preservative solution. The temperature of the water employed for dissolving the various salts is a matter for consideration. Such substances as common salt, alum, soda carbonate, or hypo may be dissolved in fairly hot water. On the other hand, sodium sulphite and potassium metabisulphite should be dissolved in water which is tepid at the most, as in the one case the higher temperature promotes the absorption of oxygen from the air, the substance changing to sodium sulphate, while in the other a considerable amount of the sulphurous acid is set free and the power of the solution diminished in consequence.—*Photographic News*.

---

#### USE OF THE MAGNIFIER WITH FIXED FOCUS CAMERAS.

The most popular and useful application of magnifiers is with fixed focus cameras, to enable things to be photographed which are nearer to the camera than is permissible with the lens already in it. With a quarter-plate fixed focus camera, ten feet is about as near as anything may be to the lens and still be sharp; often the distance is a little more than this. The photographer, naturally,

does not care to tie himself down never to deal with subjects nearer than eight feet, yet as his camera has no focussing adjustment he has that limit imposed upon him, unless he can shorten the focus of his lens, which he can do by adding a magnifier to it.

There is no need in this case to go into any calculation at all as to the focus of the magnifier necessary, for the rule for ascertaining it can easily be remembered. It is simply that the focus of the magnifier must be the same as the distance of the object which is to be sharp. So if we want to photograph something that is two feet from the camera, we must add to the lens on the camera a supplementary lens of two feet focus. Here, again, the result is only approximate, but it is near enough to be a practical guide.

If under such circumstances as this there is no need for calculation to determine the focus of the magnifying lens to be used, it may often happen that we want to know the dimensions of the image of the object. Let me give a case to make my meaning clearer. The photographer, we will suppose, has a fixed focus camera and would like to try his hand at flower photography. He naturally wants to know what forms of magnifier will give him his subject a reasonable size upon the plate; and this he can learn by calculation. Let him measure the height of the vase and flowers, and decide how high he wants that vase and flowers to appear on his quarter-plate. He finds the total height of the subject nine inches, we will suppose, and as he does not want his quarter-plate to appear too crowded, he decides that the height of the image of the vase and flowers is to be  $3\frac{1}{2}$  in. This he expresses by saying that the "ratio" of the two images is  $9:3\frac{1}{2}$ .

Now the distance between the lens and the plate, whatever is being photographed, will always be found to bear the same relation to the distance between the lens and the subject, that the size of anything on the plate bears to its size in the subject. Thus, if on the ground-glass the image is the same size as the original, the lens is equidistant from the original and from the ground-glass. If the image on the ground-glass is one-third the size of the original, the ground-glass is one-third as far from the lens as the original is, and so on; there is no need to multiply examples.

With a fixed focus camera, the distance between the lens and the plate is fixed once for all; so that what we have to do is to place the subject at such a distance that the proportion which that distance bears to the separation of the lens and plate is the same as the proportion between the original and its image. We can get at this by a very simple sum. We have seen that the distance between the lens and the plate in fixed focus cameras may be taken to be the focus of the lens itself; in the case we are considering we will suppose this to be  $4\frac{1}{2}$  in. We multiply the height of the subject by the distance between the lens and the plate, and divide the result by the height we wish the subject to have on the plate.

*An Example.*

Thus, in the case which we took as an example, we found the "ratio" to be  $9:3\frac{1}{2}$ . Then

$$9 \times 4\frac{1}{2} = 40\frac{1}{2}. \quad 40\frac{1}{2} \div 3\frac{1}{2} = 11\ 4\text{-}7$$

We must, therefore, have the subject 11 4-7 in. from the camera. As we have just seen, this means that we must add to our camera lens a magnifier of 11 4-7 in. focus. I ought to mention here that these fractions have been left in the examples lest any readers should say the examples given were simpler than any likely to be met with in practice. Actually, it would be too great a refinement to seek a lens of 11 4-7 in. focus for such a case as we have supposed; and a magnifier of 10 or 12 in. would no doubt be employed.—*Photography.*

## A PRESERVATIVE OF SODA SULPHITE SOLUTION.

The addition of glycerine to sulphite solution (writes "F. G. P.," in *The Amateur Photographer*, acts as a preserving agent, while it in no way interferes with the chemical action of the developer. The following is the formula:—

Sodium sulphite .....	5	ozs.
Glycerine .....	3½	drms.
Water .....	1	pint.

This makes a good stock solution, which may be diluted as desired. It will keep for six or eight months easily, without deteriorating to any practical extent.

## FIRELIGHT EFFECTS BY DAYLIGHT.

Writing in *Photography*, Mr. Henry Essenhighe Corke describes a method of securing portraits and figure studies shown under a lighting like that from a domestic fireplace. He says: "In the case of those taken in the studio, the sitter was posed on a raised platform, so as to be on a level with the bottom of the window, in this case of ground glass, and about two feet from the floor. The sitter should be as near the source of light as possible, so that the lighting may be rather concentrated. All the dark blinds are then drawn, leaving only a patch open about two feet square, just in front of the sitter, where the fire is supposed to be. A fender and hearthrug are then placed in front of the light on the floor. In some cases it may be found convenient to place a mirror in the "fireplace," so as to give an extra amount of reflected light upwards on to the face of the sitter. A small strip of white paper may be placed inside the fender to look like the white hearth.

"It is desirable to use a dark background, composed of dark curtains; these should not be allowed to hang in folds, but should be stretched tightly, or awkward streaks of high light will possibly show on the folds.

"Exactly the same effect can be obtained in the same way in an ordinary room, and at an ordinary window."

## GREEN TONES ON BROMIDE PRINTS OR POST CARDS.

The use of uranium and vanadium salts for obtaining green tones on bromide paper prints or post cards entails considerable expense; the following methods which have been suggested may therefore be worth trial. One important point in these and all toning processes, which must not be lost sight of, is that thick papers or cards absorb considerable quantities of the solutions, and, therefore, if not submitted to thorough washing, become stained, and no pure whites are obtained. Another point is that in some cases, particularly in the lead process given hereafter, the process of toning is actually an intensification process also, so that the prints must not be developed too far, but should be rather thin and flat.

There is, unfortunately, so far as we are aware, no process of obtaining

green tones with one solution, except by the use of vanadium; the operations are therefore somewhat complicated.

It is important that the prints or cards should be absolutely free from hypo, for as both the following processes require the use of potassium ferricyanide this, if hypo is present, will not only reduce the image, but will also lead to stains.

The first process requires the use of the lead and ferricyanide bleacher, which was fairly common in the old wet plate days. This requires some extra care, for with the exception of the acetate and nitrate nearly all the salts of lead are insoluble; this means that if very hard water be used the insoluble sulphate and carbonate of lead may be formed. The bleaching solution is composed of

Lead nitrate .....	105 grains
Potassium ferricyanide .....	70 "
Aluminium nitrate .....	70 "
Nitric acid (pure) .....	7 minims
Distilled or boiled water to .....	10 ounces

In this the prints should be immersed till thoroughly bleached to a yellowish white. It will be noted that aluminium nitrate is recommended. The use of this prevents staining of the whites, as would any alum, but the use of the latter is precluded, as they are all sulphates.

As soon as the prints are bleached, they should be well drained and immersed without washing in five minims of pure nitric acid, diluted to ten ounces with water. Of this three or four baths should be employed, and the prints should be allowed to remain in each for three or four minutes. This is to remove the soluble lead salts and to prevent the formation of the insoluble sulphates and carbonates, which would be formed as already pointed out, were hard tap water used. The prints can be well washed after these baths in ordinary water till the whites appear really white.

If the bleached prints are now immersed in the following bath, a normal green tone is obtained:

1.—Ammonia iron alum .....	48 grains
Potassium bichromate .....	24 "
Potassium bromide .....	24 "
Water .....	10 ounces

When the desired color is obtained, they should be immersed in fifteen minims of hydrochloric acid, diluted to ten ounces, and kept continuously on the move, and, if necessary, two or three baths used, till the whites are quite pure. They can then be washed in the ordinary way.

Brighter green tones are obtained by immersing the bleached print in potassium bichromate 24 grains, water 10 ounces till it turns yellow, then rinsing and then immersing in bath No. 1. It is obvious that by varying the duration of action of each bath variation in color can be obtained. The cards must be treated to the hydrochloric acid bath before washing.

Blue green tones are obtained by immersing the bleached print in bichromate solution No. 3 for a short time, rinsing, and then immersing in

Ammonia iron alum .....	48 grains
Potassium bromide .....	24 "
Water .....	10 ounces

The acid baths must be used alone in this case.

The quantity of water in these solutions may be varied so as to vary the rate of action if thought desirable.

Another method of obtaining dark green tones is to bleach the print in

Ammonia iron alum .....	12 grains
Potassium ferricyanide .....	10 "
Oxalic acid .....	3 "
Alum .....	3 "
Hydrochloric acid .....	3 minims
Water .....	10 ounces

till a bright blue tone is obtained, then to immerse it in the hydrochloric acid bath No. 2 given above, wash it, and treat it with

Sodium sulphide .....	1 grain
Pure hydrochloric acid .....	1 minim
Water .....	10 ounces

The action of this must be carefully watched, as, if the solution acts too long or too energetically, dirty blacks will be obtained. This solution can be weakened if desired. The prints must then be washed and dried.

The tones obtained by the above processes are satisfactory, though they entail considerable care and expenditure of time.—*Photo Notes.*



2252

PORTRAIT

A. G. HOLCOMBE





2226

RIVER ROAD IN WINTER

M. J. WARD

## Our Portfolio.

Prints for criticism in "Our Portfolio," only one at a time and only one each month should be sent to any of the editors whose addresses are given on the title page.

2225. H. A. Spangler.—"A Landscape" is a poor print from an apparently good negative. The subject is well selected and the point of view probably the best; but the print is much too feeble and of an even dull grey without contrast, as if considerably underprinted. That it is so is all the more the pity as the sheep have the true texture of wool in a way that we rarely see, and properly printed it would have been a very pretty little picture.

2226. M. J. Ward.—"River Road" is fairly good as snow scenes go, although the subject was hardly worth taking. But for the title we could not have recognized either the road or the river, and while a picture should always suggest more than is seen, we should hardly be left to guess as to the leading objects it includes. But taking the condition into account, it is a fairly good photograph.

2227. Harvey H. Horn.—The portrait is good except for the fact that it is not sufficiently separated from the back ground, being more like as if cut out and pasted on to it. You should manage the lighting so as to show a distinct separation.

2228. R. D. Thomson.—"Winter Woods" is a better photograph than a subject. Its title is misleading, as "woods" can hardly be correctly ap-



2228

## WINTER WOODS

R. D. THOMSON

plied to what look more like a few scattered saplings. The subject seems to be the rising margin of a pool, and while exposure and development have been correct, and this applies to both negative and print, there is no one object of more importance than another, and no trace of the atmosphere so essential to the pictorial, the extreme distance being as well defined as the immediate foreground. In short, the subject was not worth the good work expended on it. Your photographer friend was mistaken; darker printing would have materially lessened its technical quality as a photograph, the sapling-like trees being already very much darker than in nature.

2229. L. E. Brundager.—“On The Downgrade.” An engine and train approaching with tree-covered rising ground on the left and level ground on the right, all so indefinite white and black and foggy as to be simply worthless. Such snapping is not photography but merely a wasting of material. If you want to photograph a train, do it while it is standing, when you can give sufficient exposure and produce something worth showing and keeping.

2230. H. A. Spangler.—“Officers’ Circle” evidently a portion of a burying ground with foliage, one very tall piece overtopping all the rest like a tall steeple over a church; but all so badly fogged as to be of little value. A subject like this in which there is so much sky should never be “bald-headed,” that is, the sky should never be represented by white paper; nor is a print so fogged as this ever worth sending to Our Portfolio.

2231. J. W. Smith.—“Church Interior” is very good so far as it goes, but a lens of shorter focus is needed for such work. Four pews hardly represent



2232

## THE BRIEF DECEMBER DAY

F. E. WEEKS

the "interior" of a church. In saying that this is good, we mean technically, i. e., that the photography is good. Artistically, you have chosen the very worst view point, straight on, while almost any other would have been better.

2232. F. E. Weeks.—"The Brief December Day." At the first glance this is disappointing, the heavy black masses on the left attracting and keeping the attention from what is much better worth studying. But it grows on us till we begin to feel the charm of the aerial perspective in the distance. A little work on the back of the negative over the all too black trees would enable you to get beautiful prints from it.

2233. H. W. Durgan.—"The Road to the Camp" is another of the numerous snow scenes that so many attempt and with such poor success; but it is much, very much better than the average that come to us. But good as it is, it might have been just a little better. The fine old giant standing like a father over the rest should have shown more of his overspreading protecting branches by sacrificing an inch and a half of the foreground. Of course, we realize the beauty of that foreground, but the pictorial effect would have been much enhanced by a lower skyline. As it is, however, we like it very much, and like it better the oftener we look at it.

2234. B. H. Applegate.—A group of four male figures, three standing and one lying on the grass, but all staring into the camera, and as inactive and lifeless as wooden figures. It is a pity to see such excellent photography put to waste. If we had seen it anywhere else than the Portfolio, we should have sup-



2233

H. W. DUGAN

## THE ROAD TO THE CAMP

posed a joke known only to the party, something connected with what might be the title of the print, "The Three Hats," as from the way they are held in a horizontal line, they really are the most compelling line of the print.

2235. W. A. Van Wagner.—"The Path by the River in Winter" is another of those pictures, disappointing at first, but that continue to grow on one the more they study it. While there is no one object of special importance, and no point to command special attention, the wintry feeling is suggested or impressed so strongly as almost to induce a feeling of cold, and a very decided disinclination to tread the "path" till a more convenient season.



2243

## A WINTER'S MORN

E. D. LEPPERT

2236-7-8-9. H. H. HORN.—“Corn Shocks” seems to have correct exposure, but to be printed on too contrasty paper. The shadows are far too black and the scale of tones is thereby thrown all away. Otherwise the picture is excellent. The arrangement is satisfactory and the sunlight well rendered. “Apple Blossoms” is well done, but the black background is too strong. “The Winding Brook” is not worth printing. Your fourth print is technically good, but devoid of interest. In future only one print per month, please, as since the consolidation we are overwhelmed with prints.

2240-1. A. Q. BRINKERHOFF.—Your two prints are so flat as to be worthless. Somewhat underexposed and much underdeveloped, very likely from too cold developer.

2242. H. E. STOUT.—Your subject, “Passaic Falls in Winter” is not very inspiring and the surroundings are too prosaic to allow of an artistic representation. The picture is underexposed, details in snow and ice are insufficient, and the black mass of houses in the background is altogether too opaque. No treatment, however, could have made the picture more than a record of uninteresting facts.

2243-4-5. E. D. LEPPERT.—“A Winter Morn” is an excellent piece of snow photography. The sky seems to be a little too dark in the upper left hand corner, but otherwise the values seem to be excellently rendered. Snow in sunlight and shadow, ice and water are all kept in absolutely true relation and the



2248

JAMES ALLAN

distant trees and the sky fall into their proper places. This would make a beautiful lantern slide. Your night scene had too long exposure and is neither well-composed, nor a picturesque spot. The third print may have some interest to you, but we fail to discern it.

2246-7. CARLETON POPE.—“The Brook” suffers from overexposure. This is partly evident in the halation of the upper part of the picture, and more so in the water of the brook which appears to be ice. Seven seconds exposure on running water is absurd. “The Road” is properly exposed but of little interest. It runs straight through the center of the picture, which is always to be avoided, and leads nowhere. One print at a time in future, please.

2248-9-50. One print at once is our rule henceforth, to be fair to all. You seem to have mastered the subject of exposure, and your prints are well made. “Pretty Bossy” could hardly be improved, except that the light in the back seems a trifle strong. The other two scenes were undoubtedly pretty in nature, but do not photograph well.

2251. R. A. BUCHANAN.—“Mauna Kea,” a pinhole picture, has a wierd attractiveness which might lead us to reproduce it were not the print rapidly decomposing. Make a good print and enter it in our pinhole competition, announced elsewhere.

2252. A. G. HOLCOMBE.—Your portrait is very good, though in a rather low key. The background is distracting and the highest light in the



WINTER SPORT IN CANADA

W. B. BAIKIE

(See advertising pages.)



PORTRAIT OF JOHN F. JONES

FRED. M. STICKNEY

Mr. Jones is the popular president of the flourishing Toledo Camera Club, one of the most wide-awake photographic organizations in the country. The picture proves that much of the Club's success is due to the strenuous efforts of its leader.



picture, the shell on the table, is certainly not the point which deserves the most attention. Should be very satisfactory to the subject.

2253. C. B. HANNA.—"Treed" tells its story, but the background is unpleasantly diffuse. The expression of the cats is well rendered.

### AWARDS IN LENSLESS PHOTOGRAPHY COMPETITION.

We have pleasure in announcing that the prizes in the Lensless Photography Competition have been awarded as follows: First, W. H. Darbee, Parksville, N. Y.; second, J. C. Clarke, Montreal, Canada; third, W. H. Brackenridge, Harrison, Ohio. The prizes will no doubt be in the hands of these gentlemen before this announcement appears and some of the articles and illustrations will be reproduced in our next number.

## Society News.

PORTLAND, ME., CAMERA CLUB.—This club's exhibition was opened to the public on February 28, in the rooms at 571½ Congress St., and attracted a large number of interested visitors. About sixty prints, by twenty-two members, were hung, and the exhibition was well up to the club's usual high standard.

The following are the officers of the club: President, S. S. Skolfield; vice-president, J. R. Peterson; secretary and treasurer, O. P. T. Wish; lantern slide director, C. W. Dearborn; executive committee, O. P. T. Wish, C. W. Dearborn, C. F. Berry, F. W. Shaw, Matson Tinker, H. A. Roberts, G. E. Fogg, R. A. Crosby, Ernest Gerhardt; membership committee, B. W. Guppy, W. J. Hoyt, C. A. Weber.

\* \* \*

TROY CAMERA CLUB.—At the meeting of the Troy, N. Y., Camera club, held March 5th, officers were nominated for the ensuing year. The election will take place at the annual meeting, to be held the first Monday evening in April. Friendly rivalry among the members of the club is at a high pitch and much interest is taken in the coming election, which is always a red-letter event. The finance committee rendered its annual report. It showed that the organization is in a first class condition. The entertainment committee announced that there would be a euchre party next Monday evening. It was decided to hold a social gathering at the rooms following the election of officers. President Oliver appointed a committee of five to co-operate with the entertainment committee in arranging for the affair. A supper and entertainment will be provided.

\* \* \*

### TOLEDO CAMERA CLUB.

The Toledo Camera Club met Wed. March 13th with a good attendance and the largest number of prints submitted during the past year. The special subject was "Winter Creeks," and some very excellent pictures were shown.

A print by C. C. Taylor was awarded first prize for composition, texture

and tonal values, and a print by Fred Stickney came second. C. L. Lewis gave an interesting talk on "Mounting," mentioning all the latest wrinkles and styles of properly mounting prints, using illustrations of mounts, good and bad.

The third annual exhibit and reception of the Toledo Camera Club and the third annual salon of the American Federation of Photographic Societies were opened at the Toledo Museum of Art, Thursday evening, Jan. 3d, 1907 and were largely attended by the members of the Art Museum, Camera Club, and friends on invitation. After the opening night both exhibits were open to the public for ten days, showing increased attendance and interest daily until on Sunday, Jan. 13, 1907, when the exhibits closed, all the galleries were crowded with interested visitors. The Toledo Camera Club's exhibit consisted of 98 prints and as a whole is the best the club has ever hung in point of artistic quality. The method adopted in producing better work has been to permit any member to make a picture and present it at a monthly meeting for criticism and be judged by a competent judge. Should the picture fail to come up to a certain standard of excellence it is returned to the member and the member is permitted to make a second print; if this is good it is accepted for our annual exhibit and if it is not improved it is rejected. Great improvement has been made in the work of a large number of our exhibitors in this way. This system might be a good one for other clubs to adopt to encourage the beginner to get interested in pictorial photography.

At the third annual exhibit of the Toledo Camera Club, the first prize was won by John F. Jones' picture, *The Village Store*. He has won the A. M. Woolson silver cup now three successive years. *The Village Store* is especially fine in its composition and simplicity of handling.

The second prize was won by Cady Markley. His photo is a foreground study, representing a winter scene.

C. C. Taylor won the third prize. His work is entitled *Paring Potatoes*. It is a study of an old woman.

Five honorable mentions were awarded: To Ned Turner for his *Portrait of a Woman*; President George W. Beatty, of the Camera Club, for a landscape; W. W. Chapin, for his *Study of Birch Trees*; E. C. Brownson, for his landscape, and John F. Jones for his *Lifting the Nets*, a marine.

Besides the prize winners there are a number of interesting groups of pictures by C. H. Baldwin, Grace E. Carter, Joseph T. Dempsey and Walter Plehn. The judges who awarded the prizes were David L. Stine, Charles L. Lewis and George W. Stevens, director of the Toledo Art Museum.

The club is now one of the strongest organizations of its kind in the country and has won the majority of prizes wherever it has entered exhibits.

After leaving Toledo, the pictures will go to New York, Washington, Chicago, Pittsburg, Indianapolis and San Francisco.

\* \* \*

#### AKRON CAMERA CLUB.

The Akron Camera Club has joined forces with the Y. M. C. A. and is now established in its new quarters. At the first meeting in March the following officers were elected:

Wm. Spanton, Pres.; Earle E. Cahoon, Vice-Pres.; Geo. F. Kunz, Sec.; Jesse P. Dice, Treas.; Carl Scheffer, Albert S. Hibbs, E. J. Hoskin, Directors.

In order to provide for the government of the club under the new conditions, a committee was appointed to revise the Constitution. Messrs. Wm. Spanton, J. P. Dice and E. J. Hoskin were selected for this duty.

The club expects a larger growth under the new plan and has already received several applications for membership.

---

## Trade Notes.

THE PREMO CATALOGUE is the first to reach us, and confirms our statement in January that they would list their regular line of Premos and bring out something new. One of the new things, and which will no doubt be the leader for the year, is the Premograph, a reflecting camera for the very low price of \$10.00. The Premograph is a fixed focus camera with a good achromatic lens, and time and instantaneous shutter. It is made to accommodate the  $3\frac{1}{4} \times 4\frac{1}{4}$  film pack and seems to be an ideal outfit for securing negatives for making lantern slides by contact. The feature about the Premograph is that you can see the image right side up, full size, in the view finder. It is therefore an easy matter to compose the picture and get negatives so perfect for enlargement purposes, with this outfit, that the traveler who burdens himself with a large camera will soon be pointed out as a freak. There are other good things in the Premo catalogue, which is free for the asking from your dealer or from the Rochester Optical & Camera Co., Rochester, N. Y.

\* \* \*

We have to thank the J. Sussmann Photo Stock Co., of Baltimore, Md., for complimentary tickets to their banquet tendered to the professional photographers at their Aristo School, but distance and other engagements prevents our attendance. We will say, however, that every photographer who can do so should attend this demonstration of the working of developing and printing out papers, and in bromide enlarging. The school is under a corps of trained experts and will be held in Harmonie Hall, 414 W. Fayette St., Baltimore, Md., on April 9, 10 and 11. There is no charge for admission.

\* \* \*

A large user of developing papers recently remarked that he had tried many makes but found none to give him so much satisfaction as Cyko. This may be owing to a peculiarity of his negatives or methods of work but it may also apply to others. The Anthony & Scovill Company make this paper in various grades to suit all kinds of negatives and it is well worth a trial order.

\* \* \*

PRIZES FOR PHOTOGRAPHS that please Advertisers. The advertising department of Leslie's Weekly has frequent calls from advertisers for attractive photographs for use in artistic advertisements. For example, it has just supplied

a design for the advertisement, in the pages of *Leslie's Weekly*, of a famous breakfast food, and others are sought for autos, popular beverages, hotels, steamship and railroad lines, etc. To encourage photographers to turn their attention to such subjects, *LESLIE'S WEEKLY* makes this prize offer: For the best photograph suitable for use as an advertisement (preferably for one of the advertisements now running in *LESLIE'S WEEKLY*, though other advertising subjects are not barred) we will give a prize of \$10; for the second, a prize of \$5; those photographs receiving honorable mention will be purchased. The composition of such photographs should be simple, the picture should tell its own story, or, at least, suggest it with very little help from the title which accompanies it. The photographer is expected, however, to attach to each print which he submits (any number may be entered for the competition) such a title, together with the name of the article, business, etc., which the picture is intended to advertise. No copyright photographs can be received. The competition will be closed on May 15. Address all contributions in this contest to the Editor, Advertising Photographic Contest, *LESLIE'S WEEKLY*, 225 Fourth Avenue, New York City.

---

## Our Table.

---

No doubt there are many Canadians, residents of other countries, as well as natives of the United States, who would like to have an original print of the typical Canadian toboggan scene reproduced on page 184 of this number. This picture is unique and probably the only one of its kind sold. Mr. Baikie informs us that he will be pleased to furnish readers of this magazine with original 8 x 10 prints at 25 cents each; bromide enlargements, size 18 x 24, \$1.50 each; or half-tone prints on coated paper, suitable for framing, size 18 x 24, mailed in pasteboard tube for 50 cents. These prices are very low for the quality of the work, which we have seen. Address, W. B. Baikie & Co., 150 Pell Street, Montreal, Canada.

---

WITH THE CAMERA, the monthly circular from the Illinois College of Photography and Photo-Engraving, tells of attendance of students for this time of the year 131, adding that from enrollments and other indications, they will number over 300 during 1907.

The students have organized a new outside club with the intention of getting a thoroughly equipped studio for work of all kinds outside college hours, a move that shows a very decided desire to learn all they possibly can while at college.

But while earnestly at work they do not forget the necessity for relaxation and exercise, and so the Athletic Association last month gave a very successful dance which realized a tidy sum for association purposes.

Demonstrators from Gennert, Smith, Seed and Cramer visited the college during the month and, as usual, gave talks that were both interesting and profitable to the students.

FOLMER & SCHWING CO., of Rochester, N. Y., has a very fine set of lantern slide negatives made from Graflex negatives. A very wide range of sub-

jects is embraced, and most of them, by reason of the remarkable camera work, are of unusual interest. These slides are at the service of any of the Camera Clubs who may desire to secure the use of them for any of their meetings. Write direct to Folmer & Schwing Co., Rochester, N. Y.

**DAS OBJEKTIV IM DIENSTE DER PHOTOGRAPHIE**, von Dr. E. Holm. Zweite, durchgesehene und erweiterte Auflage. 160 pages with 114 illustrations. Berlin, Gustav Schmidt. Price bound, 2 marks or 60 cents.

This is a short, clear and simply written introduction to the use of photographic objectives, which will prove of the greatest use to all readers of German. It is without formulas or computations, and is especially noteworthy for the number of instructive illustrations, which contrast all the faults of a lens with the work of a properly selected or corrected objective. The book consists of 4 parts; the first describes the general properties of lenses; the second describes the special properties of various kinds of lenses, with especial reference to the Goerz series; the third is on the choice of lenses and gives information valuable to every buyer; the fourth is on practical work, illustrating all the defects of lenses in such a way as to make them easily recognizable.

• **A BOY'S VACATION ABROAD.**—An American boy's diary of his first vacation trip to Europe, by C. F. King, Jr. With illustrations from photographs by the author. Boston, The C. M. Clark Publishing Co., 1906.

This book is the narrative of the trip of a seventeen-year old boy across Europe last summer. It is well illustrated with a large number of Kodak pictures taken by him. Of these he says: "The pictures I made with my own camera. I am proud of the pictures because they are good. That much of my book I feel sure will not be criticised very severely, because I had a good camera and everybody who has seen the pictures says that they are all right." We would qualify this by remarking that a good many of the buildings have tipsy lines caused by pointing the camera upwards, but otherwise the pictures form a very interesting record of the trip. The book is written in the form of a diary, and makes many observations which an older writer might well be proud of. It is written with a naiveté and freshness which one looks for in vain in many a travel narrative by an older writer. On the other hand there are numerous typographical errors or blunders, such as calling the temple of Nike Apteros on the Acropolis "The Prison of Socrates," and the Cloaca Maxima in Rome the "Maxima Chaca Massina." These are probably to be ascribed to the haste of the trip, and are not serious. On the whole, the young author may well be proud of his literary debut, and justly entertain hopes of future ability in this direction.

**A Boy's Trip to Europe**, by C. F. King, Jr. Boston: C. M. Clark Publishing Co.

This is a simple and unpretentious narrative in the form of a diary, detailing the impressions and experiences of a sixteen year old boy on his first trip to Europe. The narrative is written with boyish exuberance and catches some valuable points which an older traveller might have missed. It is illustrated with numerous good photographs taken by the author. In spite of some defects, this is an entertaining little book.

## Letters to the Editors.

PITTSBURG, PA., March 18, 1907.

Editor, AMERICAN AMATEUR PHOTOGRAPHER.

Dear Sir:

I note in your magazine for February, 1907, under the head of "Editorial Notes," you say: "The Carnegie Institute of Pittsburg announces that it has reorganized its plans for future work, and that photographs will no longer be considered as within its scope." This statement is not justified by any action the Department of Fine Arts has taken, and is without authority. I trust you will give space to this correction of an error which was doubtless based upon some press item.

Very respectfully yours,

JOHN W. BEATTY, M. A.,  
Director of Fine Arts.

---

## Answers to Correspondents.

---

Questions for answer should be sent to F. R. FRAPRIE, 6 Beacon Street, Boston, Mass., or to any of the editors whose addresses are given elsewhere. When a personal reply is desired a stamped, self-addressed envelope must be enclosed.

---

W. E. R., Newark, N. J.—The problem of photographing a show window without showing reflections is one which can only be solved by experiment. Naturally, if there is a source of strong light behind the camera it will be reflected from the glass through the lens. By choosing a favorable time of day, and sometimes by doing the work on a dark day, the amount of light reflected will become so small as not to seriously interfere. For a small window, a possible expedient would be to rig up a dark cloth as a screen behind the camera, as is often done in photographing pictures. These expedients failing, the only recourse is to utilize flashlight, and photograph at night, having the window as well illuminated as possible by ordinary means. This is the usual commercial method.

C. H. S., Jersey City, N. J.—Exposures to be given in Switzerland are not materially different from those in this country, its territory being in the same latitude as Maine. The CAMERA AND DARK ROOM exposure table will prove a reliable guide. It is customary to give somewhat shorter exposures in high altitudes, owing to the excess of ultra-violet rays in the light, but exposures on snow and glaciers only will hardly come within your reach unless you do considerable climbing. If you take such views, however, use about the exposures you would give at Coney Island or Atlantic City on the white beach. The tendency in Switzerland and the Mediterranean countries is to underexpose. Although the lights seem very bright, the shadows are correspondingly black, and

to get harmonious negatives one must give full exposure and long development in dilute developer. Do not trust your films to the mercies of professionals in Swiss towns. They usually make and sell views themselves, and sometimes feel that amateur photography hurts their trade. They are hence very likely to return you unprintable negatives and blandly state that the fault is all yours. Either adopt tank development, which you can easily do in your hotel room, or be sure that your films are given to a competent and disinterested firm to develop.

M. J. H., Chicago, Ill.—The question of retouching pin-holes has been enlarged upon times innumerable in the photographic magazines and hand-books. Your method is unnecessarily complicated. Get a cake of Gihon's Opaque, or a stick of Chinese ink from any large dealer, and a fine sable brush. Wet the brush to form a fine point, rub it on the color to load the brush, and thus get it full of color and *nearly dry*. Then touch the pin-hole exactly in the centre with a vertical motion, the negative being so propped up that light shines through from a reflector beneath, as in retouching. If the brush is just moist enough, two or three vertical dabs will cause the pin-hole to disappear. If the color is too moist, it will run away from the centre of the hole and pile up around the sides, making matters worse. When this happens, wash off with a clean wet brush and try again after the gelatine has had time to dry.

C. T. S., Northport, N. Y.—Almost any developer you are accustomed to use will do for tank development. The only one which is really unsuitable is pyro, and there are formulas given for its use in this way. We would advise you to use glycin or ortol, however, though metol-hydrochinon or edinol will do very well. Simply dilute the developer you use ordinarily with ten parts of water, and the development will require from twelve to fifteen times the ordinary period. If, for instance, a normal ortol developer requires ten minutes at a certain temperature, when diluted with ten parts of water, the necessary time will be from two hours to two hours and a half. Fifteen minutes more or less will probably but slightly increase or diminish the time of printing.

C. P. L., Buckingham, Que.—The advantage of an astigmatic lens over a R. R. is dependent on the class of work to be done. Where fine definition and flatness of field are essential, it is necessary. It is not the best lens for indoor portrait work, and for landscape work is not to be recommended. No lens is suitable for all kinds of work.

R. C. A., Richmond, Va.—From your description of your trouble, we are inclined to believe that you have been developing at too low a temperature, and that if you will warm your developer to about 70 degrees you will have no further trouble. Most developers slow down appreciably when cooled, and the negative then fixes out more than when a warmer developer is used, leaving aside the tendency with a slow developer to remove the negative before sufficient time has been allowed to elapse.

F. M. T., Brooklyn, N. Y.—For edinol-hydrochinon, use any good metol-hydrochinon formula and replace the metol by an equal weight of edinol.

J. F. J., Toledo, O.—Your suggestion as to printing the subjects of the competitions for a longer period in advance has been duly acted on, as you will see elsewhere in the number.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co., (Incorporated), 361 Broadway,  
New York.

Address all remittances and business communications to the publishers.  
The contents of this magazine are protected by copyright and all rights reserved.

---

## EDITORIAL STAFF:

DR. JOHN NICOL, TIoga CENTRE, N. Y.

F. C. BEACH, 361 BROADWAY, NEW YORK CITY.

F. R. FRAPRIE, 6 BEACON STREET, BOSTON, MASS.

J. P. CHALMERS, 361 BROADWAY, NEW YORK CITY.

---

VOL. XIX.

APRIL, 1907.

No. 4.

---

## CONTENTS.

The Buffalo Camera Club Exhibition (Illustrated) .....	195
The Focal Plane Shutter—C. H. CLAUDY .....	202
After Treatment of Negatives—B. H. ALLBEE .....	210
Advantages of Focal Plane Shutter for other than high speed work— REESE .....	211
The Three-Color Tissue Process .....	216
About Exposure and Color Screens .....	219
The Oil Printing Process .....	220
Editorial Notes—The Little Galleries—The Federation, etc. ....	223
The Prize Competitions .....	224
Our Portfolio .....	226
Our Table .....	238
Letters to the Editor .....	239
Answers to Correspondents .....	240





Buffalo Camera Club

THE WILLOWS

Will A. Hatch

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Edited by Dr. JOHN NICOL, F. C. BEACH, F. R. FRAPRIE, J. P. CHALMERS.  
Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

Original manuscript solicited and paid for on publication. New ideas, practical hints and reports of club meetings desired. Matter intended for publication in any number should reach us not later than the 15th of the previous month.

---

Copyrighted, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (All rights reserved.)

---

VOL. XIX.

APRIL, 1907.

No. 4.

---

## THE BUFFALO CAMERA CLUB EXHIBITION.

FRANK ROY FRAPRIE.

The fifth annual exhibition of the Buffalo Camera Club was held during the month of March with unusual success. One hundred and eighty pictures were contributed by twenty members of the club, and prominent artists of Buffalo pronounced the exhibition fully equal in artistic merit to any ever held by the society. The processes represented were various, but a majority of the print were carbons. This process has always been a favorite one with this club, both in the hands of the present members and among its former members who have now become the Photo-Pictorialists of Buffalo. Next in favor to carbon came bromide, and then followed a few prints each on gaslight papers, pinatype and gum.

Through the courtesy of the club we are enabled to present reproductions of a number of prints selected from the exhibition, and to add to our criticism of the pictures reproduced some comments made on the spot by Mr. J. L. France.

The exhibition shows a marked improvement over those of former years in the striving after tonal qualities. The result is that there is a marked increase in feeling and sentiment in the prints.

Of the work of C. D. Arnold we reproduce two examples. "An Amalfi Stairway" is a picturesque bit well selected and arranged. The figures occupy admirable positions, but are a bit too conscious of the camera, and the male model is entirely too stiff. "Temple of Minerva, "Paestum," is an excellent rendition of the majestic ruin. While literal in rendering and commonplace in viewpoint, it has truth of color value and atmospheric rendering very rare in views of this subject, and is an entirely satisfactory photograph in every respect. Nos. 1, 3 and 4 by the same maker are noteworthy prints.

"Large Dogwood," by Edward C. Avery, is a decorative study of a subject which lends itself especially well to such treatment. We have placed the



Buffalo Camera Club

TEMPLE OF NEPTUNE—PAESTUM

Chas. D. Arnold

branch in a pendent position, though it appears from the titling on the back to have hung the other way up. As in nature it might have occupied almost any position, we can hardly be accused of falsifying facts. We are rather at a loss to explain why in this print the topmost flower is so much higher in tone than the others, but otherwise regard the print as pleasing in all respects.

W. E. Bertling contributes seventeen prints, of which we find we have reproductions of two. "The Albright Gallery" is, we assume, a print entered as fulfilling a set task in architectural photography for which a special prize was offered. This is certainly satisfactorily accomplished, spacing and atmosphere being all that could be desired. "A Summer Upland" has merit in simplicity, yet the haycock in the middle distance lacks texture to such an extent that it might be—nay, perhaps is—a rock. Of course it is really a matter of indifference to the scheme of composition what it may be, but there is no need of causing the question, as the bark texture of the trees is excellently rendered in spite of almost complete absence of detail. The sunny distance is a trifle strong. No. 33 is "most charming in line, lighting and composition." Nos. 28 and 31 are also highly praised.

H. H. Boyce's "Evening—Buffalo Harbor" is a pleasing marine which has nothing noteworthy in arrangement or treatment, but gives a pleasing impression of calmness and peace. "The Startled Deer" is reproduced in the catalogue and is well done.

C. A. Fussell contributes among others "Dunedin Harbour, New Zealand," a trifle pedantic in spelling, but a very pleasing blue carbon print.



Buffalo Camera Club

AN AMALFI STAIRWAY

C. D. Arnold



Buffalo Camera Club

A SUNNY UPLAND

W. E. Bertling

"The Willows," by Will A. Hatch, is a thoroughly satisfying landscape. Composition and distinction of planes are well managed, and the picture is well worthy of its position as the first one reproduced in the catalogue.

J. A. Johnson had hung no less than thirty-six prints, several of which are very well spoken of. We reproduce "A Colonial Dame." This is a good characterization, but the details of antiques, while possibly interesting to the antiquarian, are distracting to the casual beholder.

"Winter," by William H. Kunz, excellently expresses the feeling of cold and storm. The cloaked and hooded figure in the foreground is well placed, and all the figures are happily caught in attitudes expressive of motion, but not awkward. Atmosphere and values are excellent.

"White Sails," by Gustave R. Mayer, seems to be reminiscent, both in



Buffalo Camera Club

C. A. Fussell

EVENING—DUNEDIN HARBOR, NEW ZEALAND



Buffalo Camera Club

EVENING—BUFFALO HARBOR

H. H. Boyer

title and treatment, of Watzek's "Weisse Segeln," but is extremely interesting and undoubtedly an original conception. Simplicity here reaches almost its limit, the whole composition being a triangle superposed on a straight line. The two masts and the small boat outline the triangle, and the white sail and its reflection with the white figure form a secondary triangle of strong accent. A picture well worthy of study.

George S. Slotkin's "Wanderer" again has the virtue of simplicity, unfortunately marred by a most artificial atmosphere. Although the print is carbon, it has almost the quality of gum, and the streaks in the sky would suggest some of its disadvantages as well. The subject is worthy of a better print.

On the whole the Buffalo Camera Club's work appears to be earnest and actuated by artistic impulse. The members undoubtedly have much to learn, but they seem to be on the right road, and will undoubtedly produce much in the future of interest and artistic value.

---

Bromide prints can be developed in bulk by placing them back to back in the developer in couples. Keep them in motion and use plenty of developer in a big dish.

If several negatives are to be printed, and they are all of a similar density, they should be ranged round an electric light globe or gas lamp, which, when turned up, will expose the lot.



Buffalo Camera Club

W. H. Kunz

WINTER





Buffalo Camera Club

Gustav R. Mayer

## EARLY MORNING SAIL

## THE FOCAL PLANE SHUTTER.

By C. H. CLAUDY.

The focal plane shutter is a tool which is not used in anything like the quantities which it is entitled to by its worth. Many photographers seem to think this very simple instrument possessed of an esoteric mystery; its use appears difficult and knowledge of its principles, abstruse and involved. Why this condition of affairs obtains, is a little difficult to understand. A focal plane shutter is not only simple in construction and action, but much easier to use with intelligence than a fine lens,—yet many buy these lenses, and use them ignorantly but happily, who would shy at a focal plane shutter.

The focal plane shutter is so named because it operates in the focal plane of the lens,—or nearly in that position. It consists of a curtain of cloth, with a slit in it, which passes across the surface of the plate, close to without touching, the light from the lens reaching the plate through the slit.

Commercially these shutters are made with a fixed and immovable slit, in its simplest form,—one slit to the shutter—with a slit which is adjustable in various widths, as is found in the Thornton Pickard shutter, and with a long curtain, containing a number of slits in it, any one of which may be used, as in the Graflex camera,—at once the simplest and most satisfactory form.

The advantages of the focal plane shutter are manifold. It allows the maximum of light with the minimum exposure. It allows the smallest exposure possible in daylight photography (exception is made of electric spark photography, as in photographing bullets, which work utilizes no shutter at all). It allows the full F value of the lens to make the entire picture. It allows an increase



Buffalo Camera Club

Geo. S. Slotkin

THE WANDERER

of the speed of exposure without diminishing the amount of light actually reaching the plate, compared with the between-the-lens shutter. It stops motion which other shutters render as blurs. It made possible the reflecting camera, of which the Graflex is the type and best known. It allows faster work to be done with an R. R. lens than can be done with a faster lens and the between-lens shutter. It permits making snap-shots in lights which with the ordinary shutter are impossible. It is much less likely to get out of order than a between-the-lens shutter and can be more easily repaired. It permits of a slower plate being utilized for the work which takes the most rapid plate with the between-the-lens shutter,—sometimes an advantage.

Its disadvantages are few. It costs more than the between-the-lens shutter,—which is somewhat offset by the fact that as many lenses can be used with one shutter as the operator may own. It is heavier than the between-the-lens shutter. It is bulkier than the between-the-lens shutter. It requires a better knowledge of exposures to use, than the between-the-lens shutter, simply because its range is greater. The familiar Graflex shutter as now supplied on the Auto Graflex has, for instance, four curtain openings besides the time exposure openings, and six different spring tensions, which give, in the various combinations, twenty-four different shutter speeds, ranging from a tenth of a second to the one-thousandth part of a second. Some shutters go as high as a twelve thousandth of a second, and, in special instruments, to half that amount ( $1/2000$ ), but the necessity for greater speeds than the thousandth of a second are not apparent, except for use with lenses of very large focal length, or for speed close work at very close quarters. The shutters which give a twelve-hundredth of a second do not usually go as slow as a tenth, and the slow speed of the focal plane shutter is one of its most useful movements.

The principle of the device is simplicity itself. In the between-the-lens shutter, the leaves have to open, remain open a certain period and then close. The shorter the total time of the exposure, from start to finish, the longer the proportional time taken to open and close the leaves. Thus, if a between-the-lens shutter operates from start to finish in one interval (which may be called anything for purposes of illustration,—say the hundredth part of a second) perhaps two-tenths of that time are taken up with opening and closing, during which the lens is not acting to its fullest capacity,—in other words, it is stopped down by the leaves during their time of opening and closing. When the speed is increased, to say one two hundredth of a second, the same time is occupied in opening and closing. Now two-tenths of one one-hundredth of a second is  $2/1000$  of a second. Here, then,  $8/1000$  of a second made the exposure. In the second case,  $2/1000$  of a second are utilized in opening and closing as before, but the speed being  $1/200$  of a second, but  $3/1000$  of a second are utilized in making the exposure with the full open lens. In other words, two-fifths of the time are spent in opening and closing—three-fifths in making the exposure with the lens working wide open.

In all focal plane shutter exposures, the lens works to its full F value during the entire exposure, whatever that stop and F value may be.

In the above instance, therefore, the focal plane shutter at a two-hundredth of a second would admit two-fifths more light than the between-the-lens shutter,—or nearly that amount,—since some exposure goes on during the opening and closing of the familiar diaphragm shutter.

From the above hypothetical and purely diagrammatic numerical illustrations, it is easily seen that the faster the shutters are run, speed for speed, the



Buffalo Camera Club

Jas. A. Johnson

A COLONIAL DAME

higher the efficiency of the focal plane shutter, compared with the between-the-lens. Going to the other extreme, in an exposure of five seconds, the time of opening and closing does not matter. A focal plane shutter working at such a speed, would have no advantage over the ordinary shutter, in practice.

Now as to the extreme speeds credited above to the focal plane shutter. Anyone with any knowledge of mechanics must realize that no piece of photographic apparatus, with its slight weight, bulk and spring power, could be made to work in practice at a speed of one one-thousandth of a second. That is, no mass—cloth, wood, metal or what-not, could be moved across an average size plate in such a minute interval of time. The principle is different from this. The slit actually moves across the plate in about one-thirtieth or thirty-fifth of a second. That is, it falls from the top of the plate to the bottom in that time. This calculation is based on a four by five shutter, working the short ways of the plate—that is, with the slit traveling four inches. If the slit is an eighth of an inch in diameter, each portion of the plate must receive one thirty-second of the total exposure—that is, the four inches of slit travel divided by size of slit. And the slit travels in the thirtieth part of a second. Very well. One thirty-second of one-thirtieth is  $1/960$  or, approximately,  $1/1000$  of a second. This is the exposure that each part of the plate received. As the various sections of the plate received them consecutively, the entire exposure took the whole thirtieth of a second, but the plate as a whole, received light only during the thousandth part of a second.

The various widths of slit, and the various spring tensions, by which the speed of the slit is regulated, allow any latitude of exposure between one-tenth and one one-thousandth of a second, in the shutter under discussion. The higher speeds are calculated for use only when necessary. That is, they are not to be used when a lower speed will serve. It is possible to get a negative with fairly full time, at the shortest exposure—but it is much simpler to give more time unless the subject demands the shortest possible.

Contrary to the prevailing idea, the greatest speed of shutter is not needed for the fastest moving objects. It requires more shutter speed to catch sharply a man running, if he fills a fair proportion of the plate, than it does to catch a railway train, filling the same portion of the plate. It is not the speed of the object in nature, which must be calculated, but its speed in its image across the plate. For instance, at one thousand feet away, a railway train goes a thousand feet a second (this is purely hypothetical, of course. No such speed has been attained yet)! One hundred feet away, another train goes one hundred feet a second and ten feet away, a man walks ten feet a second. If they all started at once, their images would move with equal rapidity across the plate. If you don't believe this, take a pin and a string; tie knots one, ten and one hundred inches away from end, describe a circle, measure the diameters of the circles made by the knots, and figure the proportion out for yourself.

Consequently, it is the nearness to us of the moving object which must be our first consideration,—the actual speed the second. I have heard lots of complaint from some camerists that "so-and-so's shutter is so much better than mine—he stops railway trains, and I couldn't keep out the blur in making a picture of my little dog jumping!" The railway train was probably hundreds of feet away,—the little dog right up to the camera!

But, essentially a speed instrument, the greatest advantage of the focal plane shutter as applied to the average photographer, is not its speed possibilities, but the things it will permit him to do. As it admits more light, speed for speed, than



Buffalo Camera Club

W. E. Bertling

ALBRIGHT GALLERY

1000



APR 1901

Buffalo Camera Club

Ed. C. Avery

**LARGE DOGWOOD**

the between-the-lens shutter, the speed can be increased in a given light, and do, therefore, quicker work with the same result, as far as exposure is concerned. Conversely, it allows snap shots, where the other shutter takes time exposures. The writer frequently makes snap-shots in his home, using the slow speed of the shutter and a fast lens. Snap shots at stop U. S. 64 out of doors are entirely feasible, and at larger stops, snap-shot portraits in the shade give ample time. Snap shots may be made an hour or so earlier and later in the day with a focal plane shutter than with the between-the-lens type. Better speed work can be done with an R. R. lens and a focal plane shutter than with a between the lens shutter and an anastigmat of moderate speed—say F 6.5—better, that is, in the quantity of light admitted to the plate—no better in quality of image.

The things to learn in using a focal plane shutter, besides, of course, the method of manipulation, are, the amount of exposure different moving objects require—the relation between the usual exposure and the focal plane exposure—which is to be obtained by practice, and the habit of giving all the time possible. Possessing a speed instrument, many have a tendency to use it at high speed all time. There is no reason in making fast snap shots when slow ones will do, and less in making photographs with the lens wide open when a smaller stop will do,—at least when doing work for the sake of a technical photograph. Pictorially, that statement has no application.

The focal plane shutter seems to have little place in the gallery of arms of the pictorialist,—which is to the mind of the present scribe a big mistake. Clinging to the instrument is an air of speed, of sharpness of definition,—of commercialism! Hence it is, apparently, pictorially "taboo." Yet it would allow full exposure of landscapes and not blur trees with movement of wind—portraits which could be taken in the instant of a pretty pose, without asking the subject to "hold that now—don't move!"—and permit longer hours—and consequently, more varied lightings—for both portraitist and landscapist, where circumstances dictate the hand camera or the exposure which stops just short of a time exposure.

It would be unfair to the shutter to avoid mentioning at least its importance in the reflecting camera, as spoken of above. Here, where a mirror is between the lens and ground glass, an open lens is necessary. The plate must be exposed as the mirror flies out of the way. A shutter on or about the lens is impossible. It must be behind the mirror and in front of the plate. Its use not only makes this camera possible, but provides a tool which is the best for all work where a hand camera is possible. The writer confidently expects to see the pictorialist realize, some day that the Graflex and its focal plane shutter is particularly adapted to his work, as the commercial worker, the illustrator and the quick-record workers have already found out.

---

Never start out with the intention of securing photographs for the press without giving an overhauling to the outfit. See that everything is in working order and nothing left behind.

The slowest shutter speed consistent with the amount of movement of the subject should always be given. This allows in many cases the use of a smaller stop and better definition.

Use plenty of yellow light in the dark room when turning out a large batch of bromide prints. There is then less chance of things going wrong.

If many plates have to be developed at once, vertical development in a grooved trough will effect an economy of both time and space.



## HINTS FOR BEGINNERS.—AFTER-TREATMENT OF NEGATIVES.

BY BURTON H. ALLBEE.

What after-treatment shall a negative have? Beginners frequently ask themselves this question, and wonder if their negatives could be improved by any of the more or less elaborate after-treatments suggested by experts. And after reading some of the articles describing complicated methods of after-treatment the beginner usually gives up, feeling that either his negatives are too bad to be worth after-treatment, or else they are so good they do not need it. Between the discouragement engendered by one extreme and the greater or less degree of elation due to the other he usually does nothing at all.

I will say frankly that excepting in extreme cases I am not a believer in after-treatment. I believe that in a majority of instances it is possible to make a negative so good that almost no after-treatment is possible. Careful attention to exposure will generally obviate nearly, if not all, necessity for after-treatment. If a negative is correctly exposed and properly developed, after-treatment will be confined to slight changes. Upon these two important features depends, in great degree, the condition of the negative. With either one of these two important features neglected or improperly done, negatives will be practically useless, and almost no after-treatment will make them satisfactory, or even passable. Speaking in a general way, investment in a good exposure meter will save its cost many times over in negatives, which would otherwise be spoiled by improper exposure.

Unquestionably it would be better for all beginners if they forgot that after-treatment is possible and attempted, so far as possible, to expose just right, and then develop as they should. This method of working would do away with much of the necessity for after-treatment, and would certainly result in a higher general average of negatives as they run. If a beginner once masters these two fundamental processes, doctoring will become more or less unpopular and elaborate descriptions of after-treatment can be regarded as more or less interesting scientific treatises.

Reduction and intensification are about the only after-treatment which should be practiced to any considerable extent. And these are both simple processes, which have been described many times and can be successfully carried out by any beginner. Reduction is necessary in some instances where a negative is too dense, and the formulæ for the different solutions required in the process are common property. There are numerous new notions regarding solutions, but the beginner will be most successful if he sticks to the old reliable Farmer's solution. It is more reliable in its operation and the veriest tyro can use it with reasonable assurance that he will obtain fairly satisfactory results. Yet it is impossible to escape from the fact that correct exposure and proper development would have saved all the trouble of reduction and the negative would have been right in the beginning.

Intensification is sometimes necessary when the negative is too thin; but in a general way a beginner's negatives will never be too thin. The tendency of the beginner is all the other way, and reduction would be required to correct a negative a dozen times where intensification would not be needed once. A thin negative is more often a good negative than otherwise, and the amateur who learns this and makes his negatives incline to thinness rather than otherwise will seldom

err. At least it is worth while to allow one's practice to tend in this direction, since one can feel reasonably sure that when his negatives are somewhat thin they are more nearly correct than otherwise.

For painting upon the back of the negative with all sorts of materials I confess I have no use. Make the negative right in the beginning and there will be no need for this questionable doctoring. If one desires to change his negatives, introducing effects of light and shade different from those in the original scene such doctoring is permissible, but what is the use of doing it, excepting for amusement? My personal opinion is that such after-treatment is unnecessary.

Retouching comes under this head, but retouching is applicable principally to portraits, being used comparatively little on landscapes or other similar classes of work. And in portraiture retouching is resorted to less and less. Operators are learning that careful lighting, correct exposure and proper development will make a negative requiring minimum retouching. In other words, it is deemed better to get it in the negative, rather than to put it in afterwards, consequently even in this particular branch of photography after-treatment is going out of fashion.

If beginners would learn the fundamentals thoroughly, without assuming that correction can follow after-treatment, it would be much better. It is no mark of an expert, or competent operator, to be able to make now and then a satisfactory negative. It is the production of good negatives continuously that counts, and the only possible means of accomplishing this is to watch exposure and development.

---

## ADVANTAGES OF FOCAL-PLANE SHUTTER FOR OTHER THAN HIGH-SPEED WORK.

BY PERCY M. REESE.

The widespread impression that the focal-plane shutter is for the expert only, and is used by him only for high-speed work, has doubtless arisen from the fact that most photographs we see of objects moving at high speed are labeled: "Made with the ——— focal-plane shutter, exposure 1/800 second," or words to that effect. Perhaps the high price and comparative scarcity of focal-plane shutters has also been a factor in keeping the amateur from inquiring into this form of shutter and its capacities for his ordinary requirements. Whatever the cause, the impression is emphatically erroneous. It is true that the focal-plane shutter is so constructed that it permits of extremely short exposures, such as are beyond the capacities of the ordinary lens shutter, and that it gives results in photographing rapidly moving objects which cannot be obtained with lens shutters. But there is no need to confine the focal-plane shutter to high-speed photography exclusively, any more than it would be reasonable to keep a fast lens only for occasions where no other lens will do the work. The fact of the matter is that the focal-plane shutter in its newer forms, self-capping, with a series of fixed apertures and the device permitting accurately regulated slow exposures, comes nearer to the universal exposure shutter for all kinds of photography, indoors and out, than any other form obtainable. To say this is not to decry the convenience and advantages peculiar to the lens shutter—not at all, but is simply to call attention to a

convenience which, especially in America, has been too long overlooked and neglected alike by manufacturers and users.

Here and there, with increasing frequency, one comes across an amateur who has for years used the focal-plane shutter for all his work, disregarding all other forms because of the all-round convenience and efficiency of the focal-plane type. From one of these, Mr. S. I. Carpenter, whose work is well known and esteemed among New England amateurs, we have the following testimony on this point:

#### CARPENTER'S EXPERIENCE.

Practically all my 4 x 5 work has been made with a focal-plane shutter, and I have a thousand or more negatives, including every class of work, landscape, ships, country fairs, clouds, in fact, every kind of photography where, as an amateur, I have found chance to use the camera. Some of my work has been done at the higher speeds obtainable with this shutter, but not a large proportion, as I am a believer in the wide usefulness of this shutter for ordinary hand-camera work where the high speeds are rarely required. To my mind, the focal-plane shutter in design, in its close proximity to the plate, its great efficiency permitting the use of small stops, thus giving depth of field, and with its covering the plate up to the moment of exposure, is far better adapted to the general run of amateur work and will give a bigger percentage of good negatives under widely varying conditions than most amateurs are aware of or will admit.

#### AVOID THE NARROW OPENING.

The trouble with most amateurs who buy a focal-plane shutter is that they do not sufficiently grasp the possibilities it offers in its larger efficiency and larger openings. They hear so much from the manufacturers of the wonderful things done with the small openings or slits and high tension, that they do not stop to think or work out the far more wonderful capacities put into their hands by the larger openings. I never could understand why the makers of focal-plane shutters should so continually harp on exposures of 1/1000 second or show, as examples of the work of the shutter, pictures which are possible only on rare occasions, and under the best conditions, losing sight of the adaptability of the shutter for all kinds of photography when once the use of wide openings is understood.

#### HIGH TENSION FALLACIES.

My experience has shown that there is little necessity for so frequent a use of the higher speeds with the consequent use of high tensions and narrow openings, unless one's work is confined to photographing flying birds and express trains at direct angles to the lens. My notion is to use the slowest permissible exposure. It gives better negatives, less failures and very much more satisfaction. I have photographs of many fast-moving objects, even birds and trains—good negatives, with detail and desirable printing density, made with exposures much under 1/1000 second. In fact, I am inclined to think that from 1/300 to 1/500 second will accomplish all that anyone can desire to do except under the most abnormal conditions.

So, when I first got my focal-plane shutter, I opened up the narrower slot from 1/8 to 3/8 inch and used this aperture with the old tension scale. This means that when the shutter is set for 1/400 second I get an exposure of not much over 1/100 second; when the shutter is set for 1/1000 second, my exposure is between 1/200 and 1/300 second, and so on. These speeds have proved sufficient for most fast-moving subjects. Thus using the shutter set for

1/500 second, one gets as full an exposure as is given by the best lens-shutter working at its top speed; using it set at 1/200 second, I get good negatives in dull or rainy weather, and so on.

#### THE MAN BEHIND THE SHUTTER.

To do successful work with rapid lenses and a focal-plane shutter, the operator must combine patience with quickness to seize the most favorable moment for his exposure and, above everything else, the ability to relax his hold on his camera even when under the stress of excitement. By this I mean the ability to hold the camera loosely but securely in the hand. Many focal-plane exposures are failures because of the unconscious tightening of the muscles of the hand just at the moment of exposure. This relaxes with a snap at the end of the exposure and acts exactly as the vibration of the tripod acts in stand work, giving a blurred image. Much of my best work in moving subjects has been done with the camera held in two fingers by my side, level with the hips or knees, the bulb in the palm of the same hand ready for exposure. In this position, of course, care must be taken to provide for the increased amount of foreground. The finder on my camera has part of the opening covered, showing a square much less than what the ground-glass would show. I get what I want within that square and so am always sure that the object aimed at is well on the plate.

#### DEVELOPMENT.

My experience tells me that there is quite as much art in developing focal-plane exposures as there is in the exposures themselves. In this I am a believer in individual methods, knowing one's chemicals and their action separately and in combination and how to use them for the result to be gained. Many focal-plane failures I have seen have been due to incomplete development, to the use of developers unsuited to the conditions of exposure, and, above all, to the tendency of the operator to hasten development by any and every means, in order to find out what success he had. In focal-plane development time and patience are essential.

#### CLAUDY'S ARGUMENT.

Mr. C. H. Claudy, who, as a newspaper photographer, has had ample opportunity to test the all-around usefulness of the focal-plane shutter for ordinary as well as special branches of work, bases his argument on the efficiency of the focal-plane shutter, and what he has to say is very much to the point. I quote:

The focal-plane shutter is, essentially, a curtain or blind passing from top to bottom close to the plate, with an aperture its full width which lets the light strike the plate as it passes before the surface. The greater the width of the aperture, the more light gets in with a given speed of curtain—the smaller this aperture, the less light. If the curtain passes a slit two inches wide across a plate in a tenth of a second, then, if the slit be reduced to one inch, the exposure is half the first one, or twice as fast, and so on.

#### EFFICIENCY.

The great advantage of the curtain shutter as an illuminator comes from the fact that the lens is left uncapped all the time—there is no fraction of the exposure wasted in opening and closing the shutter as in the ordinary type. And the faster the focal-plane shutter is operated, the more efficient it is, in comparison with the between-the-lens shutter, drop, or behind-the-lens curtain shutter for obvious reasons. A between-the-lens shutter operating at 1/10 second may

occupy one-tenth of the total exposure time in opening and one-tenth in closing, leaving a real efficiency of 80 per cent. of its indicated time. The focal-plane shutter for the same exposure has a maximum efficiency of 100 per cent. of its working,—since the lens passes light to the plate from the instant of starting to the instant of stopping the exposure, and this through the lens aperture employed. But when we come to a between-the-lens shutter working in  $1/100$  of a second, we find that the proportion of the total exposure time consumed in opening and closing is far greater, reducing the real efficiency of the shutter to 40 per cent. of the total exposure time and even lower. Thus, a plate which receives a full exposure with the between-the-lens shutter at  $1/100$  second marked speed would get the same exposure, according to the figures just mentioned, at  $1/250$  second with the focal-plane shutter.

#### EXAMPLES.

Here we come to a great advantage of this type of instrument for other than speed work. If the subject is one which does not demand so high a speed as  $1/200$  second, the speed may be reduced to the necessary value and the exposure kept the same by stopping down the lens,—often a decided advantage for work other than pictorial, and especially if a lens of fairly long focus is being used where the depth of focus is necessarily small.

Again, there are numberless occasions where the difference between the quickest of bulb exposures,—perhaps  $1/8$  second, and a slow focal-plane exposure, say  $1/12$  second, may make all the difference between success and failure. Portraits out-of-doors where foliage moves, babies and animals, who (and which) move slowly or only a little, may blur a quick bulb exposure but are motionless to the slightly quicker focal-plane exposure, which yet admits as much light as the bulb exposures and gives as good a negative.

Probably the greatest advantage of the focal-plane shutter, however, outside of its capability for photographing objects moving at great speeds, lies in its use on a hand-camera for usual hand-camera work. Everyone who does street work, touring photographs or ordinary "snapshotting" at home and abroad, knows that there is a continual endeavor to strike a happy medium between an exposure swift enough to stop the motion of the subject and slow enough to give enough exposure for a plate, which, if not so good as wanted, is yet good enough to "doctor" afterwards. Now, with a reasonably good lens,—say one working at  $f/6$  or faster,—the focal-plane shutter will take almost anything in apparently impossible lights. I have known of good, printable negatives being made in an actual  $1/1200$  of a second, at five in the evening in April. Of course, the lens was fast and the operator expert. But the vast majority of photographers do not own a selection of fast lenses. In the focal-plane shutter they have a tool, which, in effect, adds from 10 to 100 per cent. to the efficiency of their rapid rectilinear lens. We all knew the fate of the plate exposed in the shade outdoors, if the snap had to be quick enough to stop a man walking—soot and whitewash. But the focal-plane shutter, same lens and same stop, same plate and same indicated time, will give a fully-timed negative under similar conditions. The focal-plane shutter makes your lens act as a faster lens would act with a between-the-lens shutter such as you now use. And, as the cost of the focal-plane shutter is much less than that of a high-grade anastigmat, its economy is obvious. Besides, a focal-plane shutter can be used with any number of lenses,—only one is needed for any one camera, a further economy.

Then, there is the very important question of ease of operation and reliability. It must be confessed that it is not so easy to wind up a curtain, see that a

tension screw is set right and the curtain aperture as you want it as it is to set a Volute or Sector, or, in the case of an automatic shutter, to press the bulb. On the other hand, it is actually very little trouble to adjust the focal-plane shutter, and the benefits resulting from its use are so out of proportion to the small extra trouble involved that it is hardly worth nothing at all. In the matter of reliability, the focal-plane shutter has the advantage over the other types, reliable as many of these are. The small between-the-lens shutter has been made with its parts as light and as small as possible, in order to insure compactness and portability. The focal-plane shutter, on the contrary, is constructed of few and comparatively large parts and is so made that there is almost nothing to get out of order. The most fruitful source of trouble in the between-the-lens shutter is grit in the mechanism or dampness in the dash-pot. The focal-plane shutter has no dash-pot and it would take a good deal of dirt and grit to clog its action.

#### RECAPITULATION.

To sum up, then, the focal-plane shutter offers great advantages for other than high-speed photography, because, (1) it admits of the entire focal value of the lens being used at all times; (2) it permits of the same effective exposure being made with a smaller stop and consequent gain of depth, than is possible with other styles of shutter; (3) only one shutter is required for any number of lenses; (4) it adds, effectively if not actually, to the speed of an otherwise slow lens, and (5) it is more durable and subject to less disorders than between-the-lens shutters. Finally, in its possession you have a tool which will take pictures of objects moving so rapidly that any other shutter produces only a blurred image.

#### MORE EXPERIENCES BY REESE.

Writing of a European trip, Mr. Percy M. Reese, of Baltimore, gives his experiences as follows: I took with me a reversible back, long focus 4 x 5 camera, equipped with a Goerz lens and an iris diaphragm shutter which had been tested and re-corrected until it gave accurately and invariably the speeds marked on the dial, up to and including 1/100 second at the highest speed. This is sufficiently fast for street work at  $f/8$  and gives full exposure with Eastman film in our bright sunlight. After leaving Italy, the light seemed so much weaker that I was obliged to use slower speeds and larger diaphragms for most of my work, with the result that some four hundred exposures made in Switzerland, France, Holland and Great Britain proved, on development, to be either so much diffused owing to the large stop used, or to show so much motion in moving objects, that they were useless for lantern slides or enlargements.

But the majority of amateurs are not peculiarly interested in these high-speed subjects, and for them it will be interesting to know how much added power the focal-plane shutter gives for ordinary work. The fact that the focal-plane shutter at any given speed gives the plate three or four times as much exposure as any other shutter under identical conditions makes it invaluable for portraiture without a tripod in poor light, under trees or porches, at all seasons and in all weathers, at any desired time of day or year. Apart from this, the focal-plane shutter has another important advantage. Because it allows all the light admitted by the lens aperture to pass to the plate during the whole of the exposure, it is possible to use a smaller stop than would be needed with the lens shutter and yet give the plate all the exposure required by the subject. This means better definition and greater depth of field, details often important in all save landscape or pictorial work.—*The Photo Miniature*.

## THE THREE-COLOR TISSUE PROCESS.

E. GRILLS.

Color photography with complementary tissues seems, for some reason or other, not to be taken advantage of as much as would be supposed, considering the general use to which ordinary monochromatic carbon is put, and it would be thought that the worker first initiated to the practice of three-color photography would choose this as the process in which to produce his colored results.

This process, of course, is not exactly new, although there have been many improvements in accordance with the spectroscopic requirements of the complementary pigments used in the tissues—and even now it does not require a specialist to know that these tissues are all sorts of varying shades of colour, according to the manufacturer producing them—so I secured samples of three-color tissues from various makers that I might take my pick of them, and find the following to be good, both in work and absorption—the latter, of course, a most necessary condition:—

Yellow tissue (Rotograph Co.'s);

Crimson tissue (Rotograph Co.'s);

Green blue tissue (Autotype Co.'s).

The tissues made by the Rotograph Co. gave very good results (all three of them), but the blue printing tissue is rather too blue (i. e., not reflecting sufficient green in the finished print) and the one selected for this printing is certainly superior in that respect.

## CRIMSON TISSUES.

The crimson tissues, as a rule, are rather troublesome, and many of them I have tried seem to possess more the characteristics of partially insoluble dyestuffs in a gelatine vehicle, instead of a pigment, as is usual. This is strikingly demonstrated if such a defective tissue is developed on a support using a film of collodion as the substratum, when the layer of collodion will be stained a deep pink. Hence it would be quite impossible to get high-lights when using such a tissue with a collodion substratum, which, by the bye, I do not advocate for use here.

However, it was by way of proving the suitability of such a tissue as the Rotograph Co. make for the red that led me, after testing, to choose the one given, as no "running" of color took place in the collodion film, even when the temperature was raised quite abnormally. It would be well, too, if all crimson tissues on the market were of a "lighter pink," as it is necessary to make the color negatives very soft in character, to enable one to keep the reliefs low, otherwise the subjects gets too much red; and, indeed, the same may be said of the yellow and blue, although to a much lesser extent. It is certainly advisable to work with thin negatives, however, as these always give the best results, to avoid high reliefs, as these are more troublesome to the worker when cementing the coloured images on one support than are low ones, for reasons that are very obvious.

## A TEMPORARY SUPPORT OF CELLULOID.

Another reason, perhaps, why the tissue process is not more generally adopted, is because a suitable support on which to develop the images, and the superimposed result seen, so that any adjustment may be readily effected, is not,

to my belief, obtainable, although recently the Autotype Co. have placed a very thin "Sawyer's support" on the market (a specialty made for this process), the advantage being that registration can be easily seen when mounting the three prints, on account of the semi-transparent nature of the very thin support. It is certainly better than using the old collodionised glass, but it does not enable one to see the combined color effect when the prints are in soluble condition (when any alteration might be easily made), so that it is necessary to use extreme judgment as to the quantity of colored pigment to be carried on each record to form any particular tone of color. Therefore I thought I would try sheets of celluloid, with a substratum which would give me the desired transparency. Collodion acted well, but I did not desire it, and found that a solution of spermaceti (20 grains to 1 oz. of rectified benzole) rubbed over a cleaned celluloid sheet, using a tuft of flannel for the purpose, gave me a support which was transparent, and would easily strip.

#### DRYING TESTS.

Knowing the difficulty which is often experienced when using the well-known stripping tri-color films, on account of the solubility of the gelatine changing whilst in course of drying, I made the comparative test of drying some tissues with some stripping films together, under conditions which I thought were conducive to insolubility, and was not mistaken, for although the stripping films had become so insoluble that they could not be developed, the tissues had not suffered to nearly so great an extent, and with little persuasion gave passable results. It is not assumed that the "tissue" process has merits entirely beyond those of the "stripping film," as these latter certainly cannot be improved upon for ease of development and stripping. Perhaps my zeal for the "tissue" method might lead one to suppose that I have concluded the "stripping film" is incapable of yielding as good a result (taken generally) as the "tissue" would. Referring back, however, to the exhibition of color photography held at the *British Journal* offices in January of last year, many of the best results there shown were trichromes executed with "film," so I hope it is understood that no prejudice is intended, as the test was made under very trying conditions in the following manner:—Sensitising was carried out in the usual way, and the excess of moisture removed with blotting-paper. The films were then placed to dry in a cupboard, where precautions had been taken to prevent good ventilation. Warm moisture was intentionally courted, by burning an atmosphere gas flame under a hole in the bottom of the cupboard, so that little of the watery vapor produced was allowed to escape. In addition to this, several of the air holes in the gas burner were plugged up to cause incomplete combustion (which was evidenced by the smell emitted), and it was, in my opinion, only due to the greater thickness of gelatine in the "tissue" that prevented it becoming insoluble throughout. It is also to be remembered that the working part of the "tissue" (which part would be protected by the paper base) is not so likely to be nearly as much affected by the deleterious action of the gaseous tumes as the "stripping film" (in which we have the gelatine to be dissolved away first at the surface).

#### DRYING WITH SPIRIT.

I next tried the experiment of almost completely dehydrating the tissues after sensitising, by first absorbing all excess of the bichromate solution (squeezegeeing between a sandwich of blotting-paper to effect this), and then soaking in a couple of changes of methylated spirit for a few minutes, when I again used blotting-paper to remove the excess of spirit. The tissues were then placed in a



warm cupboard near the fire, and were quite dry for printing in ten minutes—being in the frames in a quarter of an hour or twenty minutes from the time they were unsensitised. This, I think, is quite satisfactory, as otherwise I used to sensitise at night for use the following morning. When the sensitiser is made up for use with the dehydrated method it is well to allow a little stronger bath, as the water in the spirit removes a little of the bichromate. A 4 per cent. bath works well with the tissues given, and the speed after drying with the spirit is about equal to using a 3 per cent. solution in the usual way. I found no trouble with the "mineral" addition in the spirit, but it would be well to obtain the non-mineralized kind by application to the Revenue authorities, as it would be more certain to use, also more pleasant to handle, as the naphtha could be plainly smelt even when the tissues were dry, although no milkiness was apparent when developing them. This dehydrating method I find particularly useful when sensitising "print-plates" for the pinatype process, but I do not know whether it would be workable for the "stripping film" process, as I think that possibly the large excess of alcohol might affect the celluloid base. It would be worth trying, however.

Using the above tissues and a 4 per cent. sensitiser—which, by the way, I neutralised with a pinch of sodium bicarbonate instead of ammonia—the exposures ranged in about the following ratio:—

Yellow .....	8
Red .....	12
Blue .....	4

They were developed on the slightly waxed celluloid support (of course, sandwiching first for ten minutes whilst cold in the usual way with carbon tissues), and the development water kept at a temperature not much above the bare 100 deg. Fahr., as no risk should be run in rendering the support plastic; and after development they were put in cold water to set the gelatine, when the combined effect is seen, and any defect in the coloring remedied by further development of the film or films.

#### ASSEMBLING THE IMAGES.

They may then be hung to dry and the yellow transferred to paper. The ordinary double transfer paper used in carbon work answers admirably, but should be soaked for five minutes in water at a temperature of 80 degrees to take out the stretch, when it should be placed in company with the yellow in a dish of cold water and brought into contact, when the pair should be taken out and squeezed. They should then be hung up to dry, when the paper may be stripped from the celluloid thus transferring the yellow. Any wax that might be adhering to the print can be removed by rubbing with a tuft of flannel or wool moistened with benzole, when the blue should be next put on. It is, of course, necessary to use a solution of gelatine to ensure adherence of the next (blue) image, so a 6 per cent. solution of a hard gelatine is used (adding no hardener) to soak the yellow print in before applying to the blue. A little thymol may be added to prevent propagation of "bacteria," when the solution may be kept for some weeks. It is advisable not to raise the temperature of the "Cementer" much above the melting point of the gelatine when using on the prints, as the transfer paper is not insoluble gelatine.

When the yellow and blue prints are put in contact by squeegeeing and dried, they will part company with the celluloid on the application of a gentle pull at one corner, when the wax is again removed and the crimson or red print similarly treated. This finishes the print, and is really as simple as the stripping film, and at a lesser cost.—*British Journal of Photography.*

## ABOUT EXPOSURE AND COLOR SCREENS.

By F. M. SUTCLIFFE.

F. M. Sutcliffe has always something to say when he writes and therefore we are glad to reproduce the following from *The American Photographer*, the more especially as it deals with under exposure, the greatest fault in modern photography.

There is a proverb—"Shall a man fill his belly with the east wind?"

The wind is often in the east at Whitby. Is it of any use saying any more? If I were the editor of a newspaper I should stop here and leave enough blank paper for my readers to fill in their own conclusions, but the compositors have to be thought of or the majority of them would soon be out of work.

The east wind, what of it? How does it affect photography? The old instruction books told us to give three times the usual exposure when the wind is in the east.

When gelatine dry plates were first introduced commercially the makers offered two or more prizes for the best photographs taken on them; this was some twenty-six years ago. Some of the successful negatives had exposures of from half a minute to three minutes at  $f/8$ . This long exposure quite did away with the evil east wind, and gave atmosphere to each photograph.

Now if a very long exposure will work such wonders, the question arises, are not our exposures often too short? I have just been looking at the illustrations in a daily illustrated paper, and each picture seems to have been taken with an east wind blowing; so hard are they all. By the way, are not such bad pictures likely to ruin the taste of the next generation? All, or nearly all, lantern slides seem to be made from negatives taken when the wind is from the east; so black are the shadows and so chalky are the lights. At our provincial exhibitions three-quarters of the exhibits seem to suffer from under-exposure.

More likely than not, many have had a fool for a teacher, having taught themselves, and do not know what a fully exposed negative should look like.

Quite as likely is it, many have apparently taken as their standard the clear, under-exposed, over-developed photographs which professional photographers offer. Photographs probably taken when the wind was "neither good for man nor beast," when all haze and smoke were for the time being absent, clear and map-like in appearance.

Our instantaneous shutters have, no doubt, much to answer for; we often hear the complaint made that exposures less than a sixtieth of a second are difficult to make, but how rarely is such an exposure long enough for the average landscape! One of our most successful landscape photographers does not possess an instantaneous shutter; when he was photographing in our harbor here I pressed the loan of one on him, for I was sure the five or ten minutes he is in the habit of giving for woodland scenes would be far too long for open seascapes. I am sorry that I did so now, for all his work in the harbor was much under-exposed. I have seen some of his long-exposure negatives, they are an education in themselves, the range of tones is wonderful; whether this is owing to their very liberal exposure or to their slow and deliberate development I cannot say.

Much of what is mistaken for full or over exposure is simply fog caused by stray light; as matter out of its place has been termed dirt, so light which is not needed to make the image is dirt which brings fog.

In the studio we have to screen our lenses from stray light, out-of-doors we seem to think that screens are not wanted; only when we come to take the same view with a single lens, which is screened behind the diaphragm, and a doublet open to every ray that shines, do we notice the difference. Especially do we notice the value of a screen on a single lens when taking snow views, where light is reflected from the ground as well as from the sky.

Now that the light is getting worse and worse we shall do well to set our shutters at their slowest speed, and keep off all stray light till the plate is fixed, for some chromatic plates will not stand light while being fixed.

If any one wishes to see the advantage of using only the necessary light, let him take the same view with a focal plane shutter, and with one working near the lens; in the former the glare from the light in the sky will be absent, and clouds, if clouds are about, will be on the plate, but in the latter the glare of light from the sky may have slightly fogged everything, and have eaten up the clouds.

Years ago I always fixed a hat-box in front of my lens, when I had to use both combinations of my Petzval lens out of doors; without it the light from the sky fogged the whole plate.

### THE OIL PRINTING PROCESS.

A few months ago we gave an account of Rawlins' re-discovery or re-introduction of a method of printing in oil, and for the benefit of such of our readers who may have tried it we gladly reproduce the following abstract of an article, the result of his own experience, by Demachy in the October number of *CAMERA WORK*. Demachy is a recognized expert in Gum-Bichromate, and as there is a certain family likeness between the two his experience is likely to be of considerable value.

The following sensitising bath for the prepared gelatine surfaced paper will be found satisfactory, and the paper will dry very quickly. Make a stock solution of:

Water .....	100	cubic centimetres.
Ammonium bichromate.....	5	grammes.
Carbonate of soda.....	0.5	cubic centimetres.

For use, take 5 cubic centimetres of this solution, and add 10 cubic centimetres of alcohol of 90 degrees. Pin your gelatine paper on a sheet of thick blotting paper fixed to a drawing board, and brush the gelatine side of paper right and left with a two-inch wide flat brush of hogs'-hair dipped in the alcoholic solution. Fifteen cubic centimetres will cover five whole-plate sheets. A few parallel lines may remain on the film just after sensitising, but they will disappear in the course of drying. Desiccation will be completed in fifteen minutes at the most, a formidable gain of time on the previous method. Also, the gelatine having alone absorbed the sensitising solution, the elimination of the chromic salts will be much easier than when both gelatine and paper have been impregnated. After a few minutes' washing, the yellow tint of the bichromate will have disappeared, after which half an hour's soaking in cool water or five minutes in tepid water will be sufficient for the unexposed parts of the gelatine to absorb the necessary quantity of water. The print may be pigmented immediately, or hung up to dry, and inked at some later period. In this case it will require, of course, a preliminary soaking, rather more prolonged than the first one, for gelatine that has dried once will be tougher than usual.

Alcohol and ammonium bichromate sensitised papers print very quickly. A

transparent negative of the kind that bromide workers would call thin will not require more than two and a-half minutes' exposure in diffused light on a bright summer's day—five or six minutes in winter. This for No. 100 double transfer Illingworth paper, the coating of which is thin. No. 125 will require, for an opposite reason, double the exposure. But on no account must the opacities of the negative be printed through; in all cases no details, or only faint details, should appear in the high lights. A few intelligently conducted trials with the same negative will soon give one complete control over the printing operations, so much that one will soon lose the habit of opening the printing frame to watch the results; a glance at the negative will be enough to judge beforehand the proper length of the exposure.

We already know that the picture we are going to build up will be made by the difference of adhesion of fatty inks on swollen or retracted gelatine. Plain reasoning will demonstrate by simple deduction that the gelatine surface of our print must be damp, and that it must be kept so during the whole period of pigmenting, or it would take the ink on its whole surface; also that it must not be actually wet, because of the presence of even a very thin layer of water over the insoluble parts would destroy the difference of texture between them and the swollen portions of the film. These two important conditions may be fulfilled by gently pressing a sheet of fluffless blotting-paper over the gelatine side of print, until every apparent drop of water has been sucked up, and by using as a desk on which the print will be placed during development, a thick pad of soaking wet blotting-paper supported by a sheet of strong glass, which we will prop up at a convenient angle on a support of some sort.

This developing-desk or easel must be placed in the full light of a window, the light falling sideways on the print, so as to avoid disturbing reflections. The operator is comfortably seated, with his palettes on one side, and his brushes handy on the other. He will now choose his inks, according to the degree of exposure he has given, and to the effect he is striving after, bearing in mind that tacky ink will produce grain and contrast, fluid ink smoothness and flatness.

The ink may be taken up copiously at the end of the development, when things are clear and the general effect largely indicated, but the initial taking should be faint. So the ink that we will start with will have to be spread over the palette—a slab of porcelain, ground glass, or ordinary glass—in a very thin and equal layer, always superior in diameter to that of the brush that is going to be used, or else the hairs will not be uniformly charged with pigment. Daub the stag's-foot stencilling brush five or six times over the thin layer of ink, and transfer the pigment to the print with rapid and light touches, holding the brush nearly perpendicular to the print, so that the wedge-shaped point, which must be kept uppermost, touches the print first, and opens out as you press downward. As to where you will begin your inking, that is a matter of personal taste.

As a rule, a landscape may be inked all over faintly, and worked up locally afterwards; but for portraits I prefer to ink the face first—right up to what I intend to keep as a definite value; then I build up the surroundings to harmonise with the face value, taking great care never to introduce an accent as strong, or, worse even, stronger than those I have put in the face and figure. This system has the advantage of showing clear, decisive work in the face, which is, of course, the centre of interest in a portrait.

For it is the same with the oil process as with water colors or oil; the best bit is the one that has been painted with a quick and sure touch. I do not believe in messing over a face, adding color, and taking it away. I have done it,

of course, but the result has never been equal to what I have accomplished with decisive and quick work. On the contrary, one may not hasten over backgrounds, for it is the value of the surroundings, and the localisation of the dark and light spots, that will make or mar a picture. It is the same in a landscape: after having very faintly developed the whole of the picture, choose your strongest spot, the one intended to catch and retain the eye, and work the rest up as a setting to that particular value; but do not dab haphazard all over your picture, or you will lose the thread of your argument, and end in pure drivel. Here is a rule that may be of use to the beginner: rapid and brusque action of the brush, be it perpendicular or horizontal, will remove color from all slightly inked parts, and leave unchanged all parts more heavily covered; it will produce contrast.

The hopping action, described by Mr. Rawlins, is founded on this peculiarity. It consists in holding a straight-cut stencilling brush between the thumb and the two first fingers, perpendicularly to the print, which must then lie flat on the table, and in letting the brush fall on the pigmented surface, and bounce up again. It is caught as it bounces, and the movement is repeated over and over again. This is an excellent dodge for correcting any error in pigmenting—over-pigmenting, in fact; but I believe that it is wiser to try and get the proper result by inking progressively than by forcibly removing pigment that has no right to be where it is.

Mr. Rawlins mentions turpentine as the best solvent to use for removing the pigment down to the gelatine. I much prefer plain water. Absolutely white accents can be produced with a hogs'-hair or sable brush (according to the thickness of the layer of pigment), dipped in cold or lukewarm water. And the action is thus limited to the actual portions that are submitted to friction—while turpentine or benzine will always dissolve more or less of the adjoining pigment, and, however carefully dabbed away, will still change the normal thickness of the fresh pigment.

If you want to drive away every trace of pigment from the surface of your print, you can do it with a soft sponge and cold, or slightly tepid, water when the pigment has not been heavily applied; but in the case of a thickly inked print, you will have to use automobile naphtha, which has the advantage of drying very quickly. Of course, the print should be soaked again before pigmenting, and it is safer to let it dry totally before soaking it anew, to avoid unequal swelling of the gelatine. Automobile naphtha will also come handy for the cleansing of the brushes, a messy, but all-important operation, which must be performed carefully and completely, before the ink collected on the hairs has had time to dry—at a safe distance from lamp or candle, of course.

Oil prints take a long time to harden, and even to dry, unless they are very slightly inked, and up to now I have not been able to make their surface scratch-proof. I have tried different kinds of varnish, but the really efficient ones show too much for my taste. The best results have been given by Soehnle's varnish for water colors, thinned down to one-third of its normal strength with alcohol of 90 degrees; even this is not entirely satisfactory. There is something to be done in that direction, as well as in several others, for though the process is not new, it has never yet been given a fair trial.

---

There is a growing demand for the photographic advertisement. Press photographers should take advantage of all likely subjects and submit prints to well-known advertisers. Children and animals are favorites for advertising purposes.

## Editorial Notes.

Mr. Alfred Stieglitz's Little Galleries have afforded us a most interesting show these last few weeks. Mr. Coburn (to whom, in passing, we tender an apology for our printer's vagary last month in renaming him Alice instead of Alvin), has returned from European triumphs and given us a sight of his pictorial achievements. George Bernard Shaw, as was meet, was given the most conspicuous place opposite the entrance door, as a fine portrait head, and George Bernard Shaw, as was merciful, was relegated to the least conspicuous place, the dark wall between the windows, portrayed in robust but naked beauty as "Le Penseur."

The first room is devoted to portraits, and, looking at them, we understand the enthusiasm of the London reviewers when these were exhibited in London. Of course, Coburn has been fortunate in the men he has portrayed. Each is a man of justly deserved intellectual fame, and their strength is manifest in their faces. But these are so simply and yet so beautifully lighted that we forget that they are lighted at all, or even photographed—we seem to be viewing the men themselves.

But Coburn has done better work and stronger than in portraiture. He has an eye for the beautiful in everything, and has translated the most uncouth forms and places into decorative composition. Edinburgh is an old, old town and historic; Liverpool is a raw, bustling commercial port. Coburn has astonished Liverpool and Edinburgh alike by producing pictures from their grimy closes and crowded dock-basins. These are here and many another triumph—Notre Dame sent back into the mist by a bold dash of flaunted leaves, the Arch of Titus looming high, the clinging, crawling life of ivy sprawling forth from musty tombs. In all has Coburn seen what others know not. Some of his work is immature, but he is one of the leaders of our era in photography.

\* \* \*

As the sun day by day ascends the heavens and the actinic value of his light increases, there seizes us once more the fervor of the enthusiast. From the high shelf down comes the camera, the plate holders are loaded, and we tramp across the green fields looking for pictures—or pretending to. For half the cause of our wandering has naught to do with the black box we carry with us. The primitive instinct for change, the ancestral *wanderlust* it is, that has seized us and driven us forth to nature. Civilization has deprived us of the possibility of loading our few belongings on the back of a beast of burden and moving on to the better hunting-ground or more fertile soil that man has always imagined must lie just over the first range of hills or across the unknown forest. But it has given us the train and the steamer, and has only lessened the love of roaming. So in the spring we take down and dust the camera and walk ten miles on the Old Boston Road, or mayhap start for far Japan. May it be long before we lose the impulse and the ability to go forth and drink in the glories of the spring.

\* \* \*

We published last month a letter from the Carnegie Institute which denies the statement that "photographs will no longer be considered within its scope." Our authority for the statement was a press dispatch sent to all the great dailies

of the United States. It doubtless is true that no definite action has been taken committing the Institute to this program, but the fact remains that the Institute refused to give space to the Third American Salon.

We are also informed by the President of the Photographic Section of the Academy of Science and Arts of Pittsburg that his society did not withdraw from the Federation because it could not pay the dues, and that its Print Interchange is not intended to antagonize the Federation. We gladly give space to his statements, as we do not care to leave a false impression of the matter in the minds of our readers. Our earnest desire is for the progress of photography and we hope all the clubs will work together for this end, in the ways which seem best, without jealousy or strife.

\* \* \*

THE FEDERATION.—The annual meeting of the Board of Governors of the American Federation of Photographic Societies was held in the rooms of the Pittsburg Press Club on March 20th, 1907. One motion in which was embodied the decision to abolish the present classification of clubs, to fix the dues of all clubs at \$60 per annum, and to divide the express charges of the traveling expenses of future Salons pro rata among the clubs holding the same, contained sufficient matter to considerably change the policy of the organization and caused a good deal of discussion, but was finally unanimously adopted. Heretofore there have been three classes of clubs paying three different amounts of dues and entitled to different privileges. The passing of the motion puts all upon an equal footing and does away with the minor exhibitions, leaving these to the management of the various clubs, and will simplify work at Federation headquarters. The only other change in policy was the abolishment of the prize system which existed in the purchase of pictures chosen by the jury. Hereafter the Federation will purchase no pictures and offer no prizes of any kind. The President was authorized to appoint a committee to be known as the Publishing and Publicity Committee, whose duties will be to print and distribute all Federation literature and to furnish the photographic magazines and other sources of publicity with news and any other interesting reading matter, pictures, etc., which might tend to attract the attention of the public to the Federation and its work. The report of Treasurer Phillips showed the Federation to be in good financial condition with all bills paid and \$380.05 in the treasury. Mr. W. E. Strayer, of Wilkinsburg, was appointed Secretary to fill the unexpired term of Paul H. Reilly, resigned. The following preliminary jury for the 4th Salon was elected: Wm. H. Zerbe, Wm. T. Knox, Frank G. Wood, Dwight A. Davis, Wm. H. Phillips, John Chislett, H. W. Minns, W. S. Cline, R. E. Weeks, D. H. Brookins, R. L. Wadhams, R. L. Sleeth, Jr. Preparatory work on the 4th American Salon will now be immediately taken up.

\* \* \*

THE CALENDAR COMPETITION.—Owing probably to the fact that it was set after the first of the year, few entries were made in this competition, and the judges decided not to award prizes, but rather to postpone the competition till a future date. The entries have been returned with the exception of one portraying "The Brook" which bears no name or address. The competition will be set forward to close Nov. 1.

The subject proposed for April is "Flower Pictures." Entries will be received until May 1.

Prints for future competitions are solicited from any reader, whether or not a subscriber to the AMERICAN AMATEUR PHOTOGRAPHER. They should be sent by mail or express, fully prepaid, to Frank R. Fraprie, 6 Beacon St., Boston, Mass., to arrive on or before the date set for closing the contest. Prints for these competitions *must not* be sent to the New York office, as they are likely not to be received by the judges in time for consideration.

First and second prizes will be awarded a bronze medal in each case, with blue ribbon and silver bar, and red ribbon and bronze bar, respectively. The first award includes also a cash prize of five dollars. Honorable mention may be given to meritorious pictures which do not attain prize rank. Awards may be withheld or divided at the discretion of the judges. Pictures awarded prizes or honorable mention may be reproduced, and unsuccessful pictures will be returned if requested.

Future subjects are: For May, Landscapes. Closes June 1. For June, Instantaneous Pictures. For July, Pinhole Pictures. For August, Animals. For September, Marines, including Views of the Sea or Great Lakes, Shipping, Yachts and Harbor Scenes. For October, Mountains. Also Calendar Competition. For November, Atmospheric Effects, including Fog, Mist, Rainy or Snowy Days, Rainbows, Sundogs, Clouds, etc. For December, Genre. For January, Portraits. For February, Snow Scenes.

---

## Society News.

BOSTON CAMERA CLUB.—The seventeenth annual exhibition of the Boston Camera Club was held at the club rooms, 50 Bromfield St., Boston, Mass., from April 2nd to 13th. The exhibition was of unusually high character and reflected in the great variety of subjects, the diverse interests of the club membership. The number of pictures made in Europe was unusually large, and added greatly to the interest. As we expect to publish next month a selection from these pictures, we will enter into no criticism here.

THE OLD CAMBRIDGE PHOTOGRAPHIC CLUB held its fourteenth annual exhibition in the hall of Miss Kelly's School, Cambridge, Mass., from March 30th to April 4th. The exhibition contained nearly two hundred prints and made a very favorable impression. A majority of the pictures exhibited were gum-bichromate prints, and the workers of the club appear to be masters of the process. We enter into no details of the exhibition here, as we hope to present later an illustrated article on the club and its work.

NEWARK CAMERA CLUB.—The members and friends of this club had a most enjoyable time at the annual dinner of the club on the 8th inst. The following is a list of the officers that have been elected for the ensuing year: Dr. E. Guenther, President; Thos. Elsum, Vice-President; L. Wright, Jr., Treasurer; W. S. Norris, Secretary. Executive Committee: Miles I'Anson, Frank Cotherman, Robt. Caddock, J. Schlittenhardt, H. J. Young, H. E. Rohlfis, Wm. Archibald, Alexander Berne, Otto Brautigam.





2258

R. G. Ancarrow

AT PLAY

## Our Portfolio.

Prints for criticism in "Our Portfolio," only one at a time and only one each month should be sent to any of the editors whose addresses are given on the title page.

2254. J. L. BLAIR.—"Home Portrait," a portrait of a baby in one of the various contrivances for supporting children in sitting or walking; and, so far as the photography is concerned, very good. It was a mistake, however, to introduce the machine, apparatus, or whatever it may be called, as it, with its looped wire, attracts and keeps the attention that should be given to the interesting face. As it is, it is just such an illustration as might be made for the catalogue or price-list of the maker of the apparatus. Try again under the same conditions but without anything to distract attention from the figure itself.—N.

2255. H. E. STOUT.—"Riverside Park in Winter." This is a fine subject from a very fine point of view, but the print is not nearly what it should, and, unless we are mistaken, what it might have been. Although there seems to be traces of snow to the right and left, there is an entire absence of contrast; only an almost uniform dull grayish black, everything from the foregoing, to the extreme distance being of the same tone or color, even the sky is only a few shades lighter. There is also an entire absence of the necessary atmosphere, the distant Grant Tomb being as well defined as the nearest object. The negative, as it is, should give a much finer print, and probably one finer still after a little intensification.—N.

2256.—A. Q. BRINKERHOFF.—"A street in Winter" may be satisfac-



2261

## THE STONE CUTTER

C. H. Brooker

tory to those who appreciate the style, but we are not amongst them. The print includes one side of the street, the street itself, and a row of good-sized trees, probably fronting the houses on the other side; but, like 2257, there is really only one tone or color—gray in two shades, a light including street and sky, and a dark, including all the rest. There is neither detail nor contrast.—N.

2257. A. L. APPLEBY.—The print is simply worthless, a mass of white and black, the result of very much under-exposure, and equally over-development. But even had the photography been good the subject was not worth it. It seems to be an ugly wooden bridge from a viewpoint that makes it go horizontally right across the space. From this point of view it can never be worth photographing.

2258. R. C. ANCARROW.—“At Play,” a group of five children playing in the margin of a sheet of water, judging from the waves, more like the seashore



2264

## HOMEWARD BOUND

H. E. Stout

than anything else, and it is simply splendid; one of those rare snaps that come occasionally that delight all who see them. Here is real action, every figure as if a little motor and yet with definition sufficient to bear enlargement to four or six diameters, a step which you should take at once, as it is too good a gem to remain so small. Enlarged to, say, 12 x 8, it would grace the walls of any Salon.—N.

2259. H. L. STROM.—There is little to say about this except that it is a fairly good photograph of an uninteresting subject; two or three "burros" tied to a vertical pole on the left, and the front of a low rough building on the right. One-half of the bare foreground should be trimmed off, a trimming that would very much improve the arrangement.—N.

2260. F. M. TERHUNE.—"An Old Grainery," a delapidated building but still in use as is evident by the figure catching grain in a sack from a chute, with two sacks already filled. We cannot say that the subject is picturesque or that you have made it pictorial, but undoubtedly you have done the best possible. The composition is well balanced and the light well managed, although an improvement would have been to trim from the right so as just to retain the "B"; that side is just a little too heavy as it is.—N.

2261. C. H. BROOKER.—"The Stone Cutter," a workman working on a large square block of granite, apparently producing the pointed tool effect; is an example of good technical work, the texture of stone both in its wrought and unwrought phases being admirably rendered. It is a pity that you did not catch the hammer anywhere else than resting on the tool, as that would have suggested motion which this does not. The hammer an inch or two above the tool would have made all the difference. The window should have been lower in tone as it is evident that the light on the figure and stone does not, much at least, come from it. Taking it all in all, however, it is a really good thing.—N.



2266

WINTER

H. H. Harvey



2268

CREEK IN WINTER

F. M. Stickney



2270

M. C. Nichols

## READING

2262. H. A. SPENGLER.—“Plowing,” a good although somewhat hackneyed subject, well placed except that the trimming off of the tree on the left would have improved it. The white paper sky is, however, very objectionable, and shows, moreover, that all the rest must be more or less wrong. Exposure should always be sufficient to admit of the necessary detail being brought by development before the sky and the various grades of lights become, in the negative, equally opaque. The negative of this, however, would give a better print on a more suitable paper, this is too lacking in tone values, and altogether too gray and faint.—N.

2263. JOHN DAVIS.—“A Missouri Pastoral” would have been a charming picture of its kind except for the common and, in this case, fatal fault,



2271

DESOLATION

Forman Hanna



2272

C. F. Fisher

under exposure. Everything but the sky is far too black, while that is far too white. Three or four times as long exposure, with suitable development, and you would have had a very pretty picture.—N.

2264. H. E. STOUT.—“Homeward Bound,” a tug on its way to the city in the distance, is selected as much the better of the two sent, and it is really very good, although, as a rule, we do not care for pictures of such low tone. The rolling smoke and troubled water both before and behind the tug sufficiently suggest motion, and there is just the atmosphere necessary to show the distance of the city; but the low tone—the sky and water not far removed from the black of the smoke, is too far from the natural to please us.—N.

2265. FRED A. JENNINGS.—“Birches,” but for the unnaturally white sky, would have been admirable. We may add that the smallness of the figure saves it from altogether spoiling the picture, nothing being worse in such a view than an unsuitably dressed figure staring, as this is, at the camera, stiff as a lay figure. The composition is very good, and it only needed a longer exposure and shorter development to be a fine picture.—N.



2274

M. C. Nicolas

2266. H. H. HARVEY.—“The Dam, Winter,” is technically a very fine photograph, although, pictorially there is much room for improvement, especially as regards the head of the dam running in a straight horizontal line right across the space. But as “a record of fact” nothing could be better than the reproduction of falling water and ice-covered supports of the dam-head.—N.

2267. F. E. WEEKS.—“Snow-bound” is apparently a creek or stream with tree-clad banks during or after a snow-fall, but it is so weak and feeble that we have to guess a little as to what it really is. Such prints seem, to us, hardly worth the trouble of making. We do not, by this mean to condemn pictures that are merely suggestive and lead to the imagination of far more than they show; they are often, if not always, the very best; but in this there is no suggestion, everything being shown, but in such a faint, feeble way as to need guessing to know what is meant.—N.

2268. F. M. STICKNEY.—“Creek, in Winter.” We choose this in preference, both because a better subject and because not of such good technique as the other. The curves of the snow-covered creek with the shadows flitting across make a charming foreground, which the unnatural blackness of the trees beyond go far to spoil. We know the difficulty in getting the exposure that will give something like a true rendering of snow and trees at the same time, but so in proportion is the credit when it is well done. Nor is it so difficult as many are led to believe. The first essential is *sufficient* exposure, which is rarely given, and then careful development with a weak solution or a solution weak in the reducer—the generally so-called developer, pyro, etc., etc.; the object being to bring out the necessary detail in the trees or other less lighted objects before the snow or other high lights have by accumulative action have lost all natural texture.—N.





2275

Lester E. Brundage

IN THE STUDIO



2278

W. W. Brackenridge

## A LOGGING TEAM

2269. FRANK SMITH.—“Warren St., Syracuse,” is very suggestive of a cold winter day, and from a technical point of view, or a “record of fact” is a very good photograph. As a picture, however, it suffers from a too even balance of the house on each side of the street. The right and left masses too equal in size. A very slight turn of the camera either to right or left would have all the difference. Then development has been carried just a little too far; the sky being whiter than sky ever was, while the snow is without texture. Yes, the publishers gladly pay for whatever they use.—N.

2270. M. C. NICHOLS.—“Reading,” a lady reading a book, is an example of the beauty of simplicity, and, but for the meaningless dark blotch representing all of her body below the waist, would have been a really good portrait. Expression and arrangement are fine, and would be more effective on a paper of smoother surface, as indeed small prints always are. Try again and see that the lower parts of the figure are properly lighted, or so lighted as to indicate something else than a formless blotch.—N.

2271. FORMAN HANNA.—“Desolation,” is one of those steep foreground compositions that are so often seen, and almost as often without any reason for the arrangement. This, at first gives the impression of an old log house on the top of a hill, and makes one wonder how they got up to it; nor does continued examination lead to more light on the subject. This much must be said in its favor, that something like a fallen tree begins at the extreme foreground and leads the eye half way up to a shadow which, at an opposite angle, leads that eye on and up to the objective point, the log house. Only to be disappointing by finding it so altogether out of focus as to make it impossible to say whether or not there are figures at and about the door.

Later, we have gone again and again to this, and the oftener we go the better we like it, so that but for the mistaken lack of focus of the house, we should have come to the conclusion that it was a really fine picture.—N.



2275

E. W. Humphreys

## LIGHT AND SHADE

2272. C. F. FISHER.—This is a nameless print of the same high foreground style, with nothing to lead up to but a really fine bit of cloudland. It is an example of first-rate photography, but of a subject that we should have thought not worth the film on which it was taken. Poor, however, although the subject be, the print is abundant evidence of the fact that on the "N. C" film, with suitable exposure and development, beautiful cloudland, trees and an ordinary grassy foreground or hillside may all be perfectly reproduced on one film by one exposure.—N.

2273. A. G. HOLCOMBE.—"The Ledge." We can only say of this that it is an excellent photograph of a subject not worth photographing. A mass of angular white occupying about two-thirds of the space with a two-stemmed tree rising from its center, and the upper branches of other trees rising behind. We can make nothing of it and can only say that the photography is too good to be wasted on it.—N.

2274. M. C. NICHOLS.—The prominence given to the figure on the left detracts from what would otherwise have been a good landscape composition. One begins to wonder what the man is doing with the pole and he is, too, evidently posing. The rough paper is far better adapted to this subject than to the portrait (No. 2270), but the evil of under-exposure and over-development is still more pronounced in the landscape and you should give special attention to technical proficiency as your prints already show considerable artistic or pictorial good taste.—C.

2275. LESTER E. BRUNDAGE.—"In the Studio," a flashlight. Just the

reverse of the closing injunction to 2274, applies in your case. The print is technically very good indeed, but is shorn of all artistic beauty by printing under a hideously shaped mask. In reproducing the print we have trimmed away the margins and thus got rid of the grotesque effect at the expense of cramping the figure. Would also suggest that the picture would have appealed to us more if the artist had been depicted as engaged with his work on the easel, instead of staring at the camera.—C.

2276. H. A. SCHOENHALS.—“A Chinese Lady,” is a more than ordinarily good snap-shot which shows the adaptability of a little camera like the No. 1 Kodak, for such character sketches. The value of the picture is certainly not enhanced by the presence and the attitude of the son of Italy; otherwise it is an excellent thing of its kind and worthy of enlargement.—C.

2277. FARMAN G. HANNA.—“Winter” is of the same class as No. 2271, a steep snow-covered foreground leading to nothing but a mass of brush-wood badly out of focus. Your work shows good tone values and we regret that you have not turned it to better purpose. The wilds of Arizona can furnish you with far more pictorial subjects, which, treated with fidelity, would make pictures which we would be delighted to reproduce.—C.

2278. W. W. BRACKENRIDGE.—“A Logging Team,” is something out of your usual style and technically very good. We can imagine the owners of the team engaged in cutting timber in the dark recesses of the forest but cannot understand how the sky is rendered so dark even where there are no obstructing tree branches, while the shadows denote that a bright sun was shining.—C.

2279. E. W. HUMPHREYS.—“Light and Shade” is a suggested title for your nameless print which would have been a fine picture with proper exposure and development. You have seemingly stopped the development at the right stage, but the exposure was not enough to record any detail in the dark recesses of the woods on the left. What trace of detail there is in that portion of your negative can be preserved by masking with tissue paper in the printing. As this is now your only remedy it is worth a trial and another brand of paper might be used with advantage. Your other print is our next.—C.

2280. PAUL WITASCHECK.—“In Time of Peace,” a picture of a dog and cat in fond embrace, is a cute conception well carried out—a picture which we would like to have reproduced. There is a mottled effect, however, which covers the whole print, and which seems to have been caused by excess of alum in the fixing bath, or drying the negative too hurriedly by heat.—C.

2281. H. E. STOUT.—“Portrait,” the first in this line that you have submitted, is very encouraging. The profile is good and the lighting on the face is satisfactory when we cover over all the rest of the picture and only examine the profile; but remove the mask and the whole thing is flat. There is no concentration of the light, no attempt at modeling, the light on the back of the head, neck and shoulders is entirely too strong. The shadow portion of the head is of exactly the same color and texture as the background, there is no relief or atmosphere and it really looks more like a photograph of a chromolithograph than a photograph from life. The head is also turned too much to one side, giving a very twisted effect to the neck. Also, although the low-necked dress reveals considerable of the anatomy, there are no flesh tones; these, as well as the lace work, being plain white paper. Remedy: Use a head screen to moderate the

light and narrow down your main source of light, also place the sitter farther from the background and expose sufficiently long to render the shadow detail before the highlights have developed to opacity.—C.

2282-2283. H. W. DURGIN.—“April Showers” and “Clearing Away,” two pictures from the same point of view, showing varied and well-rendered cloud formations, are as good examples of technical work as you have yet submitted. We agree with you that the printed-in clouds in the one picture appear too near and too wooly, but the other print is well balanced and shows that you *can* do good technical work, even if you are not particular to select a very picturesque location or subject.

2284. R. H. BEIL.—“Rounding the Curve,” is a well-rendered picture of a locomotive and train of cars traveling at high speed. The trail of smoke is the only proof of motion, as the sharp detail of the engine shows that it might be standing still. Such subjects are generally unsatisfactory, especially when the view shows the rails running into the foreground and widening at an impossible angle. The most realistic photograph of a train in motion that we have seen was made by moving the camera in the same direction as the train while the exposure was being made, showing the train with perfect clearness, but the landscape slightly blurred as we see it from the window of a car.—C.

2285. H. B. BROCKETT, JR.—“Portrait.” A winsome face and handsome figure, posed amid surroundings that combine to make a very objectionable setting. The upright post repeats the lines of the figure, while the patchy effect of the sky breaking through the foliage which is out of focus, makes a very confusing background. The development has also been carried too far to make up for insufficient exposure, as is shown by the white paper where we look for detail in the dress, in contrast to the inky blackness of the fern pot and stand.—C.

---

## Our Table.

---

THE SENECA CAMERA MFG. CO. sends out its annual catalogue in the usual attractive guise. The canvas finish cover portrays the polychromatic head of an Indian brave, presumably of the Seneca tribe. Within, the get-up is excellent. The catalogue lists a very extensive line of cameras, both for plates and films, wherein the prospective buyer cannot fail to find something suited to his needs.

THE PHOTO-MINIATURE, Nos. 77 and 78, for January and February respectively. Tennant and Ward, New York, and of all dealers in photographic material.

No. 77 deals exhaustively with the Focal-Plane shutter and incidentally with shutters in general; and we may say in a word that what is not told here is not worth knowing. We may also say that there are few photographers who, after carefully studying this monograph, will not consider their camera complete until it's fitted with both focal-plane and between the lens shutters.

No. 78 has for its subject, “Printing Papers Described and Compared,” a subject of which most photographers are apt to think they “know it all,” and to them this book is especially useful as the best possible means of showing them their ignorance. It begins by describing the various printing processes or methods;

goes on to show the degrees of gradation of the various papers; and, perhaps, best of all, shows how to select both process and paper best suited to certain kinds or classes of negatives and subjects. Of course we do not agree with everything that is said in the book. In speaking of "developing" paper, giving a silver image of course, the author says: "Theoretically, a carefully made development paper print should be absolutely permanent;" presumably the statement of the editor, than whom, we know, no one knows better how subject to deterioration silver is.

But such trifling errors do not to any extent lessen the value of one of the most valuable numbers of the always interesting and instruction-giving *Photo-Miniature*.

**SAINTS IN THE PHOTOGRAPH.**—A photograph has had a disastrous effect upon the fortunes of a young couple in Montenegro. The girl is the daughter of the pope or parish priest of Dulcigno, the youth is the son of a pope ministering in Cetinje.

They have been betrothed since childhood, and the marriage was very soon to take place. The young man has just about completed his course in theology, and immediately after the marriage he was to be ordained a priest.

Naturally the couple desired to be photographed together in their bridal finery, as everybody else is in Montenegro nowadays. But the difficulty was that the only man in Dulcigno who had a photographic apparatus had not a photograph gallery.

Various localities for the picture were suggested—the front of the pope's house, a grove near by—but unfortunately they determined that the best place of all was the church, and the unhappy pair took their stand within the altar space while the photographer set off his flashlight.

When the picture was developed the bride appeared to be leaning on the breast of a statue of the Madonna and embraced by it. The young man's head exactly blanked out that of St. John the Baptist, and his face appeared wreathed in the aureole belonging to the saint.

Two more saints seemed to be flanking the pair as bridesmaid and groomsmen. The photographer was rather pleased with the picture; the couple thought it a good joke if not a good photograph; the two popes, their fathers, saw no harm in it.

But the people of Dulcigno objected to it. The saints were insulted and the church profaned, and they clamored for the punishment of the couple.

They appealed to the police to close the church, and they petitioned the Metropolitan to suspend the two popes from the priesthood as a punishment for their share in the desecration. To quiet the storm the young man had to give up his engagement to the girl and retire, at least temporarily, into a monastery. —*The Sun*.

---

## Letters to the Editors.

### NOTE ON COPYING LIGHT.

EDITORS AMERICAN AMATEUR PHOTOGRAPHER:

Dear Sirs:

In your issue for January, I notice a letter from George E. Fitch regarding granular copies. Having, myself, experienced considerable difficulty in keeping

down "grain" in copying when using a copying board, I tried the plan of top-lighting. The only extra apparatus needed is a tilting tripod-top, such as the one made by Folmer and Schwing. The tripod is first securely fastened with Mellen's tripod stay (a most useful piece of apparatus), and the copy placed on the floor where it will get the unobstructed light from an ordinary window. The local extension and distance of copy from lens are then adjusted and sharp focus obtained, sliding the copy on the floor for centering. With a large stop the copy negatives are free from grain, although the same copy mounted on a vertical copy board will show plenty of it without two equally strong artificial lights placed equidistant at the sides.

Very respectfully yours,

MALCOLM DEAN MILLER, M. D.

---

## Answers to Correspondents.

---

Questions for answer should be sent to F. R. FRAPRIE, 6 Beacon Street, Boston, Mass., or to any of the editors whose addresses are given elsewhere. When a personal reply is desired a stamped, self-addressed envelope must be enclosed.

---

M. R., Buffalo, N. Y.—This reader sends in a platinum print and a silver proof from the same negative, and asks why the print is not satisfactory. In her opinion there is a lack of vigor with no gradation of tones and the whole has a mushy look. A formula for intensifying platinum prints is also requested. —In regard to the prints we would say that in our opinion the specimen sent is as good as the proof accompanying it. The negative is apparently too thin to get the best results on platinum paper, as this process requires vigorous negatives for the best results. The print sent shows very good color and modulation under the circumstances. Probably the best formula for intensifying platinum prints when the color is not to be changed is that proposed by von Hübl. Make two solutions: A. Sodium formate 48 grains, water one ounce. B. Platinic chloride 10 grains, water one ounce. Take fifteen minims of each, make up to two ounces with water and immerse the prints. When sufficient intensification has been obtained, wash and dry. Before this process is applied the paper must be thoroughly freed from iron salts.

G. C., Bloomfield, N. J.—It is quite difficult to discharge the silver entirely from an old negative, and if the developer has stained it at all, you will find it impossible to remove so as to get a clear film. You might, however, try the following, recommended by Dr. Eder. A. Ferric chloride one ounce, water eight ounces. B. Potassium oxalate two ounces, water eight ounces. Mix equal parts of A and B and add a small quantity to a strong solution of hypo. Immerse the plate in this, and the image will gradually disappear, the silver being first converted to oxalate and then dissolved by the hypo.

W. A. S., Berlin, Ont.—With a R. R. lens it is better to focus sharply with a large stop and then stop down. With some of the modern anastigmats focusing must be done with the stop to be used.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co., (Incorporated), 361 Broadway,  
New York.

Address all remittances and business communications to the publishers.  
The contents of this magazine are protected by copyright and all rights reserved.

---

## EDITORIAL STAFF:

DR. JOHN NICOL, TIoga CENTRE, N. Y.

F. C. BEACH, 361 BROADWAY, NEW YORK CITY.

F. R. FRAPRIE, 6 BEACON STREET, BOSTON, MASS.

J. P. CHALMERS, 361 BROADWAY, NEW YORK CITY.

---

VOL. XIX.

MAY, 1907.

No. 5.

---

## CONTENTS.

The Boston Camera Club—F. R. FRAPRIE.....	243
The Workings of Gas Light Papers—E. THEO. BEISER.....	250
Some Rules in Art—MAX LUTY.....	259
Coloring Lantern Slides.....	262
To Bleach Engravings for Photographing.....	263
Editorial Notes.....	264
Our Table.....	269
Awards in Picture Postcard Competition.....	278
Awards in Bromide Enlargement Competition.....	278
Our Portfolio.....	280
Society News—Camera Club of New York—Brooklyn Academy of— Photography .....	286
Letters to the Editor.....	287
Answers to Correspondents.....	288





CHILLON AT DUSK.

WENDELL G. CORTHELL.

(Boston Camera Club.)

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Edited by Dr. JOHN NICOL, F. C. BEACH, F. R. FRAPRIE, J. P. CHALMERS.  
Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

Original manuscript solicited and paid for on publication. New ideas, practical hints and reports of club meetings desired. Matter intended for publication in any number should reach us not later than the 15th of the previous month.

---

Copyrighted, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING Co.. (All rights reserved.)

---

VOL. XIX.

MAY, 1907.

No. 5.

---

## THE BOSTON CAMERA CLUB.

FRANK ROY FRAPRIE.

Through the courtesy of the members of the Boston Camera Club, who were kind enough to furnish us duplicates of their prints, we are enabled to present to our readers a series of reproductions of pictures from the annual exhibition of the club. This was held early in April and was open to the public for two weeks. At the end of this period most of the prints were sent to the Portland Club in exchange for the annual exhibition of this society, which in its turn was exhibited in Boston. In thus exchanging exhibitions, the clubs are continuing a custom of several years' standing, which has been stimulating and useful to each society. An effort is now being made to extend this print interchange among the principal eastern clubs, but Boston has not definitely entered the new arrangement.

For several years the Boston Club has endeavored to keep its walls covered with pictures during the entire winter season, inviting prominent photographers, both in and out of the club, to lend collections of their prints. During the present winter a number of such collections have been shown, by Messrs. Andrews, Cabot, Chenery and Corthell, of the members, and Charles F. Clarke, Rudolph Dührkoop, Frederick Haven Pratt and Captain Eldridge (Civil War photographs) from outside the club. These exhibitions are open to the public, and the interest aroused by them brings many new members to the club.

The annual exhibition this year was very interesting and contained many excellent pictures. As each member is entitled to have one picture hung in any event, it sometimes happens that prints must be hung which would not pass the jury but for this rule, but it does not seem this year to have been necessary to hang a single unworthy print, a fact of which the club may well be proud.



SURF.

(Boston Camera Club.)

SAMUEL B. READ.

In accordance with our custom in recent months, we append a few lines of constructive criticism on the pictures reproduced, in the hope that it may be helpful to our readers. These opinions may not meet with the approbation of our readers in all cases, but they may help to show some of the reasons why these pictures were selected.

Of all the castles of Europe, Chillon, by its situation and its inherent picturesqueness, is perhaps most often seized upon by the photographer. Many, among them the writer, have the opportunity of photographing only from windows of a passing train, a process not conducive to the best results, but which may still produce a passable print. Mr. Corthell, however, sat down in the vicinity, and studied the scene to find the most favorable conditions. The result was the print "Chillon at Dusk." The time is so chosen as to bring the bold outlines well out against a beautiful sky, while the shadows, though deep, are still not opaque. The whole scale of tones is present and well handled. The composition is good, and the picture wholly satisfactory.

"Redhead Ducks," by H. Frank Currier, is a carbon print of such exquisite technique as to awaken the admiration of all beholders. It can hardly be surpassed as a piece of photographic still life. Correct in color values, texture and composition, it was undoubtedly the best piece of technical work in the exhibition, and withal artistic.

Gurdon R. Fisher's "Boy in Sweater" is an excellent piece of portraiture and a fine character study. Our reproduction fails to render all the delicate modeling of the original.

Mrs. Lillian Baynes Griffin contributes also a portrait which is very satisfactory. The modeling in the original is especially fine. Note the extreme



THE FISHING SCHOONER "HOPE."  
(Boston Camera Club.)

W. M. SNELL.



LANDSCAPE.

(Boston Camera Club.)

ERNEST H. WASHBURN.

simplicity and the fine distinction of texture and separation of planes between the sitter and the background. The hands are well treated and the relation of values well preserved.

Joseph Prince Loud contributed a series of Italian views, enlargements from 3A F. P. K. films, of which we have reproduced "Across the Valley, Ravello." Aside from the excellent choice of subject, the recession of planes is worthy of note. As to the composition, we might prefer the strong note of the cypresses a trifle less central. Yet the arrangement as it stands is pleasing, and therefore successful.

Charles Peabody is an associate of the Photo-Secession and we therefore expect in his work some of the qualities which are popularly supposed to be always present in the work of this group. Pre-eminent among these are softness and diffusion of focus, and Mr. Peabody's work usually possesses these characteristics. The portrait which we reproduce is an excellent example of his work and is very pleasing. We cannot feel, however, that the vertical line on the left helps the composition, as the light area which it demarks is a trifle too insistent. Were this brought down to a tone below that of the face, we are confident that it would improve the print. Aside from this, quality and spacing are excellent.



SHARPENING UP.

(Boston Camera Club.)

F. A. SAUNDERSON.



PORTRAIT OF MRS. C.

CHARLES PEABODY.

(Boston Camera Club.)

"Surf" is a realistic and beautiful picture which owes its success chiefly to the beautiful rendition of the disturbed water in the foreground. It shows motion arrested, not petrified. Our print was a trifle too dark and the rocks in the foreground are a trifle over printed.

"Sharpening Up" is an excellent genre, but perhaps a trifle contrasty in the reproduction. The original was printed through bolting cloth, which causes a moiré effect in the reproduction. This impairs the quality of the shadows to a certain degree. The original is a very satisfactory piece of genre work.

W. M. Snell has caught his "Schooner Hope" in thoroughly satisfactory style. The placing, the lighting, the exposure, the development, have all been correct, and the result is a print which needs no criticism.

E. H. Washburn's "Landscape" is a print which was exhibited at a



ACROSS THE VALLEY, RAVELLO. JOSEPH PRINCE LOUD.  
(Boston Camera Club.)



former exhibition of the club, his portrait in this exhibition not being accessible for reproduction. A pleasing print of good quality, well composed and showing admirable separation of planes and rendition of atmosphere.

In "The Old Stone Bridge," Mr. Wing has found a pleasing subject and worthily rendered it. One only criticism is that the sky is somewhat harsh. Arrangement is good and shadows transparent.

---

## THE WORKING OF GASLIGHT PAPERS.

By E. THEO. BEISER.

The negative used for gaslight papers is not confined to any particular quality, although, as with all printing processes, certain kinds of negatives produce better results than others. By thorough understanding of the properties of several grades of paper, one can usually match the gradations of his negatives properly. Gaslight papers as a rule tend to increase contrasts, therefore, if it is necessary to select or produce negatives for this purpose exclusively, those slightly tending to flatness, moderately well developed, and having plenty of detail, should be preferred.

A Metol-hydrochinon developer gives negatives well adapted to these papers; and is also suitable for the development of the paper itself.

### STORING THE PAPER.

Where a considerable amount of paper is used, it should always be procured in half-gross or gross lots, as it thus becomes justifiable to use a few sheets to determine its behavior, which may be recorded as a guide to the use of the rest. Also, when packed in boxes it is better protected from pressure and abuse than that which comes in the envelopes containing but a dozen sheets. Where it is used from the latter packages, they should be stored upon edge, and loosely packed. This will help considerably to prevent the friction marks by which many are troubled.

Dampness is very detrimental. The paper must therefore not be kept in a room where cooking takes place, or where much steam is generated, neither should it be stored in the same compartment with chemicals of a volatile nature, especially hydrochloric acid, ammonia, alkaline sulphides, iodine, etc., which continually evolve fumes very harmful to the emulsion. If these precautions be carefully observed, paper may be kept for years without deterioration, providing, of course, it be protected from actinic light.

### SELECTION OF PAPER.

By the proper selection and manipulation of the paper, contrast to almost any desired degree may be obtained. After much experimenting with all the papers procurable and thought to be in general use, I have compiled the following reference table, which I feel sure will be of much value, to the novice especially, as it shows at a glance the relative amount of contrast obtainable, with any of the papers, by using the developer (see formula later on) either normal or diluted; and also the comparative sensitiveness of these, which will be spoken of in a subsequent part of this article.



PORTRAIT OF H. S. ALLEN.

LILLIAN BAYNES GRIFFIN.

(Boston Camera Club.)

TABLE No. 1

PRINTING MEDIUM	A. Relative Softness obtained behind a contrasty negative with		B. Relative contrast obtained behind a flat negative with		C. Comparative Speed. 1 = Most Rapid
	Normal Developer	Same diluted 50 per cent.	Normal Developer	Same diluted 50 per cent.	
	%	%	%	%	
Argo—Carbon .....	50	30	80	70	8
Portrait .....	80	70	30	30	6
Special Portrait ...	70	65	50	40	4
Artura—Carbon Black..	70	65	70	70	1
Azo—Any Grade .....	65	40	70	40	4
Cyko—Contrast .....	25	25	90	90	11
Normal .....	65	40	70	40	5
Soft .....	100	100	10	10	1
Darko—Carbon Matte ..	50	30	70	65	8
Smooth Portrait ...	55	40	65	50	2
Rough .....	55	50	30	40	4
Glossy .....	30	30	80	65	9
Kruxo—Carbon Matte ..	50	50	70	50	7
Smooth Portrait ...	55	65	65	50	9
Glossy .....	30	30	50	30	9
Rotox—Any Number ..	70	65	70	70	2
Velox—Regular .....	50	30	80	90	4
Velvet .....	50	40	50	30	3
Special .....	55	65	55	50	2
Metalotype .....	10	10	100	100	12

No attempt has been made to carry the figures out to fractions, round numbers in all instances being used.

It is often difficult for the beginner to understand just what is meant by a contrasty, or hard, a flat, or soft negative, and the scheme about to be outlined may do considerable towards obviating this.

Beside each particular grade of paper (Table No. 1), the figures found in the two columns to the left or right indicate the amount of contrast attainable under different conditions, as compared with all the other papers. In glancing over these figures we may note that the three grades of Cyko paper, Contrast, Normal and Soft, give an exceptionally wide range of contrast; and owing to this fact they will be used in determining the quality of a negative, in which the degree of contrast is unknown.

The negative to be judged is first printed on the Contrast grade (this must be marked upon the back of each print to identify them), until the best appearing print has been obtained. It is then, in the same way, printed upon the Normal grade, and lastly upon Soft. After these prints have been fixed, washed and dried in the usual manner, they are placed together for comparison, and the best one selected. If this should happen to be the print made on the Normal grade, while neither of those made on the Contrast or Soft grade are really bad, it is safe to conclude that the contrast of the negative is quite evenly balanced, and a fair print may be expected on almost any other printing medium. Should it happen that the Contrast grade alone produces a pleasing print, while the Normal is not near so good, and the Soft is bad, the negative is said to be flat or soft (i. e., lacking contrast), and such printing papers as are found in the table to give a high degree of contrast (see column B), as for instance:



REDHEAD DUCKS.

(Boston Camera Club.)

H. FRANK CURRIER.

Metalotype, Carbon Argo, Regular Velox, etc., should be selected. On the other hand, if the better print has been obtained on the Soft grade of paper, while that on the Normal ranges intermediate and the Contrast print is exceedingly hard, the negative is hard or contrasty (the reverse of soft or flat), and to obtain the best results should be printed with such mediums as Portrait Argo, Rotox, Artura and the like, which tend to reduce contrast by giving a high degree of softness (see column A).

Now, one and the same grade of paper does not always give similar results under negatives of varying contrast, as may be observed by reference to the table. Thus, Glossy Darko, which produces considerable contrast with a flat negative, on the other hand gives a comparatively soft print with a hard negative, while Rotox paper gives fair results with both. Hence, a close study of these figures and facts will be of much service to the photographer who desires to carry a limited assortment of paper and yet attain the best results from his faulty negatives.

#### SENSITIVENESS.

Although many tests were made to determine the exact sensitiveness of the emulsions of the various papers given in the table above, it was found in some instances different lots of the same grade of paper showed varying sensitiveness, though not to a great extent. In such cases average figures were inserted (see column C), and should the reader find the paper he is using to be more or less sensitive, he need but change them to suit the case. The method of applying these figures, or representative speeds, to calculate the exposure required for an untried medium, from a known exposure of some other emulsion, is as follows:

1 represents the most rapid working emulsion and 12 the slowest. The paper represented by the 12 requires twelve times as much exposure as 1, or twice that of 6; 6 needs six times the exposure required for 1, and one-half of that necessary for 12. As an illustration, we will suppose that a certain negative was found, by test, to require an exposure of 1 minute, upon Regular Velox, and as the print showed too much contrast it was desired to use Special Velox, which, after a consultation of the table, proved to be a softer working paper. Now, the representative speed of Regular Velox is shown by the table to be 4, while that of the Special grade is but 2. Four compares with two as two to one; and as the exposure with the Regular paper was 1 minute, we must give one-half of this, or 30 seconds, which would be found the correct time required to obtain a good print under the same negative on Special Velox, providing in both instances the conditions were analogous, that is, the intensity of light and distance from same. Printing, together with the intensity of artificial light at various distances, will be more fully considered later on.

#### DEVELOPMENT.

The development of the positive may be accomplished in several ways. Probably the majority are accustomed to the bath method, i. e., immersing the whole print in a tray containing the developer; but another manner in which it may be accomplished, though far from being new, has some advantage over the former, but appears to be in use by but few. This is brushing the solution over the dry print with a small camel's hair brush, or bit of cotton. I shall describe only the latter of these two methods here, as I believe it to be far superior for small prints.



THE OLD STONE BRIDGE.

(Boston Camera Club.)

W. H. WING.

1107



BOY IN SWEATER.

(Boston Camera Club.)

GURDON R. FISHER.

Who U

For the purpose I use a small, wooden photo-clip, sold in the shops for a few cents, and loosely insert a small wad of absorbent cotton. That which is used for medical purposes should be obtained, as it is perfectly free from all grit and harmful chemicals. The measure containing the developer is a tubular one ounce graduate, and when the wad of cotton is inserted, as it is a snug fit, the aperture is practically closed, and the developer is thus protected from the oxidizing action of the air. The dry print is laid upon a square of glass, a piece of oil cloth, or the bottom of a tray, somewhat larger than itself, which previously should be gone over with a damp cloth to cause the print to adhere more firmly. The cloth should be preserved for this purpose, and should any considerable length of time elapse between the development of prints, the developing solution left on the glass must be removed to prevent it oxidizing and staining the next print developed.

The cotton is well saturated with developer, and applied to the edges of the print, making a complete circuit, then worked inward quickly. When the center has been reached (especially if it be a good sized print), the cotton is again saturated and applied, this time working from the center outward, always keeping the edges covered with plenty of the solution, as it will be noticed they tend to develop slowly. The brushing must be executed with as little pressure as possible; and at no stage should it be stopped, for the emulsion when first wet greedily absorbs the developer, and should it happen that some part becomes dry, oxidation is accelerated, stain resulting. When the cotton is slightly stained yellow, inclining to brown on the under side, it should be replaced by a fresh piece, lest this color be transmitted to the prints. It should never be handled with the fingers, as they often contain hypo from being in the fixing bath, which if mixed with the developer may give rise to brown stains upon the prints, impossible to remove afterwards. If well diffused it will discolor the whole image, looking as if an excess of bromide was in the developer.

When a brush is used, great care must be exercised to keep it clean. It should never be put away unless thoroughly washed. Simply rinsing it in water will not remove all the developer, which adheres closely to the hair, and it must therefore at times be immersed in an acid bath, composed of 1 part hydrochloric acid and 10 parts water, which effects the removal of this. When the brush is first put in this bath, effervescence takes place, and continues until the alkali of the developer has become neutralized. It must be well worked about in the acid to insure contact with all the hairs. After effervescence has ceased (in about 10 minutes), the brush is removed to several changes of clean water. If this precaution be overlooked, it will be found that in time the prints develop more slowly, and acquire very disagreeable tones. It is a good plan to go through the hairs while still wet with an old comb kept for the purpose. This removes the loose hairs and causes the rest to dry straight, and always in good condition; which means better service and a longer life for the brush.

This is quite an economical method of developing small quantities of prints, as an ounce of developer will suffice for a dozen 4x5 prints or their equivalent. However, there are three essentials in a developer for this purpose, it must work clean, that is, minus abrasion marks, which by the way none of the ordinary developers do, and not too rapidly, and allow of a reasonable time for development without stain (i. e., it must not oxidize too rapidly).

After numerous experiments I have adopted the following formula, which has, besides the properties just outlined, several others to be spoken of in due time:

UOPM



Metol, 6 grains; hydrochinon, 30 grains; anhydrous sodium sulphite, 120 grains; anhydrous sodium carbonate, 200 grains; potassium iodide, 20 grains; potassium bromide, 10 per cent. solution, 20 drops; water, preferably distilled, 10 ounces. These chemicals should be added to the water in the given order, allowing each to dissolve before adding the next. If small bottles are completely filled and well corked to exclude air, it will keep for a long time. It is not advisable, however, to make up too large an amount for storing, as with an aged developer one cannot obtain the pleasing tones given by a recently compounded solution.

Development papers require an addition of potassium bromide to the developer to prevent chemical fog, recognized by the paper darkening as though previously exposed to light. This, together with the fact that the emulsion cannot withstand prolonged action of a weak developer without stain, makes it necessary to employ, for obtaining the desired degree of contrast, other means than the *amount of bromide and concentration of bath*, which are of such importance in bromide and negative work.

If the chemicals used were always uniform, and absolutely pure, and freshly distilled water was at all times accessible, then, with the same emulsion, the precise amount of bromide to be used in the developer might be ascertained and recorded for permanent reference. But, as the amount is dependent upon the purity of both chemicals and water, the nature of the emulsion and the temperature of bath, it becomes necessary to determine the correct amount by actual trial. An excess produces brownish or greenish blacks, and also renders development slower, while insufficient causes the trouble previously spoken of—chemical fog. When the correct amount has been used, the proper time may be allowed for development, without the whites becoming in the least fogged, and a pure blue-black image is obtained, much resembling the platinotype. The amount given in the above formula may be taken as the minimum and should always be added in making the developer. In some cases it will be found sufficient. Just before commencing development, however, a small unexposed strip of the paper to be used is partly immersed in the developer for 30 or 60 seconds (the maximum time required to develop a print), and if at the end of this time no difference is apparent between the two sections, the developer may be used as it is. Should it be found that the portion which had been in the solution is in the least discolored, then a drop or two of a 10 per cent. solution of potassium bromide must be added, and the same experiment repeated. It is well then to remember, *to obtain blue-black, the developer must be used full strength, and contain the smallest allowable amount of bromide*; while for jet or pure black a trace more is required, or the solution as prepared for blue-black is diluted with about an equal volume of water.

Some of the papers tend to give images differing in contrast when, under like conditions, they are treated with a developer of varying strength. Thus in Table No. 1 in columns A and B we find that when Carbon Matte Darko is printed under a hard negative, and developed in a concentrated bath, a softer print is obtained than when a dilute developer is used. On the other hand, when this paper is used with a soft or flat negative, more contrast is obtained with a normal solution than with the same diluted. This, then, may be resorted to as another means for obtaining contrast, though to a comparatively small degree.

While on the subject of development, it might be remarked that this process should be carried out in sufficient light to allow of the finest detail being

Metol

seen, as otherwise the operator may remove a print to the fixing bath which is found afterwards to be streaked and unevenly developed. It rarely takes more than 60 seconds to complete the development of any print, and never longer than that to get it into the hypo bath, consequently a distance from the light such that the paper would not be affected by an exposure short of 4 or 5 times the length required for manipulation, may be considered safe.

*To be Continued.*

---

## SOME RULES IN ART.

BY MAX LUTY.

Although there is a tendency among photographers to contend that there are no rules in Art, yet there are certain conventions, to borrow a phrase from a well-known art critic, into which pictures fall. The following instructive diagrams and explanatory notes are given by the author in "*Photographische Kunst*."

Although the photographer is denied the use of color, being bound to some extent by the limitations of his instrument, and has, therefore, to rely upon line, form, and the infinite graduations between white and black, it is possible for him to suggest color, as is done by every engraver and etcher. The misleading effect of color can always be obviated by the Claude Lorraine or black glass mirror, which may be obtained from every dealer in artists' materials. The intelligent use of this will frequently prove that a scene which is otherwise satisfactory will, when translated into black and white, prove disappointing. The world which the artist reproduces is enclosed by the four sides of his frame; it must be a perfect whole in this, and, if it is to awaken a feeling of pleasure in the observer, it must be so arranged that a harmonious ratio exists between the whole and its parts.

### THE SILHOUETTE.

One of the most important features is the silhouette, for this is closely akin to a frame. It may be dark on a light ground as in Fig. 1, or light on a dark ground as in Fig. 2. In the latter the tree stems and boughs do not detract from the bright silhouette, which is quite distinct to every observer. Fig. 3 shows an extremely irritating silhouette. The reason why 1 and 2 are more interesting lies in the rhythm with which the silhouetting line moves with the frame—now short, now long, now rising and falling, at other times straight or jagged. The rythmical enclosing line is similar to the time of a piece of music; a monotonous continuous tone is never pleasing. Such is Fig. 3.

### MASSSES.

Now let us turn to masses. Masses of equal size weaken one another, and therefore care should be taken to avoid placing them in such a position as is shown in Fig. 4.

A principal mass only acquires its importance by contrast with a smaller one—Fig. 5.

If we divide the picture by a diagonal, we can obtain equal importance and contrast, and the due proportion of light and shade—Fig. 6.

If on one side of this line we place the whole of the dark masses, and on the other the lights, we obtain the broadest effect—Fig. 7. Yet if the whole of the composition lies to one or the other side of the diagonal the result is a want of harmony, and it is erroneous to suppose that a very small object on the other side restores the balance, as since it is separated from and in contrast to the more distant parts it gains ten times in importance—Fig. 8.

#### CORRECT POINT OF VIEW.

The choice of the point of view is naturally of the first importance, and the use of the correct focus lens. Above all things the unity of the picture is of the greatest importance, and it should always be considered when the picture is in the frame; the effect of surfaces and of spots is then seen. Sometimes trimming will help wonderfully, but if the correct distribution of masses can be obtained without its aid the better the effect.

The old and modern masters are not afraid, as is well known, in order to obtain any particular massing, to divide a figure or object at any place. This cutting away or through should not, however, as is too often seen, be done as a striving for effect without judgment, and just because one has done it, and therefore others must follow suit because it is "modern."

Very frequently landscapes will be seen having on one side twigs or leaves, which are quite without motive, and take away entirely the sense of completeness or finish. If on one side there is required a balance to a mass on the other, a tree should be arranged as shown in Fig. 9. The cutting of this should be done so that by its mass it minimises the larger mass, and also so that its vertical line should form the frame and cause the imagination to increase the space.

#### LIGHT AND SHADE.

Besides the satisfactory arrangement of line and mass, there must also be an artistic arrangement of light and shade. These may be divided into five parts, light, half-light, middle tones, half-dark and dark. If a picture is composed of light and half-light, the shadows become stronger and more vigorous, and it will then have a dull appearance, which for certain low keys is exactly what is required. If, on the other hand, it is dark and half-dark, the lights will appear more brilliant, but will then frequently be spotty, as the half-lights which are essential to connect the two are absent. The whole will then have the appearance of gloom, and there is the danger of its looking heavy.

If the picture is composed chiefly of middle tints, the dark and light parts will have equal effect, and the total effect may be weak and insignificant.

#### SOME DEFINITIONS.

Light and shade are the means of producing three things: relief, harmony, and breadth. The first gives precision of form and the corporeal appearance of nature; the second proceeds from the congruity and combination of one part with another; and finally the third, the all-pervading breadth, is the necessary accompaniment of the expansion and size. Too much relief produces hardness and frigidity; too great delicacy and blending of the individual parts cause weakness and want of expression, and in striving after breadth one may easily become flat.

Turning again to our diagonal line and placing on one side of it the greatest dark, and on the other the highest light, we obtain, as already said, the



Fig. 1.



Fig. 5.



Fig. 9.



Fig. 2.

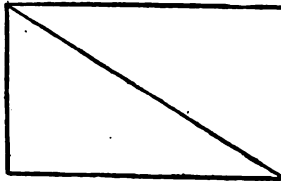


Fig. 6.

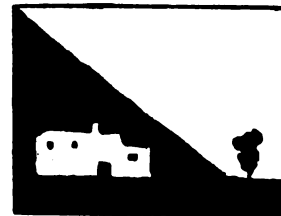


Fig. 10.



Fig. 3.



Fig. 7.



Fig. 11.



Fig. 4.



Fig. 8.



Fig. 12.

greatest breadth of effect. If, however, we want to obtain a balance or to combine the two, the only thing that we can do is to take a piece from one and replace it by a piece from the other. The harmony of the whole is increased by this process, and lights and shadows become through opposition more intense—Fig. 10.

Frequently the highest light lies in the middle of the picture and shades off to its edges, being bounded by a framework of shadow, which unites the whole. The light then become extremely brilliant especially if a small portion of the shadows is brought into conjunction with it—Fig. 11.

Finally, we may bring our deepest shadow into the middle of the picture and distribute the light round it. Then the dark, as it is isolated, gains in strength and importance—Fig. 12.

That the above brief laws are open to modification is self-evident, and must be left to the artistic taste and feeling of the landscape operator.

Eclectic art in the beginning of this century has cried down composition. It places the principal accent on the attainment of juxtaposition in the picture; the true artistic feeling as to how the whole fills the frame is lost.

## COLORING LANTERN SLIDES.

Anyone who has seen the exquisitely colored Japanese slides must admit they are not only artistic but extremely pleasing. The particular method adopted by the Japanese is a secret, but the slides, whilst possessing all the fidelity of a photograph, seem to be nothing more than colors, it is only here and there that one can detect anything like a photographic basis.

I have been experimenting with aniline dyes and find that they give the nearest approach to the delicacy of the Japanese colored slide. The aniline colors are liable to fade but it has been suggested that a small quantity of bichromate solution added to the gum water will tend to make the colors more permanent.

In the first place, black-toned lantern plates should be used, fully exposed and developed with a metol developer only just long enough to bring out the whole of the image—density is not required. After fixation and thorough washing, the slide should be laid film down on a sheet of opal glass or white paper, or even the bottom of a clean porcelain developing dish will do; naturally, whichever be used, it must be well wetted to prevent the gelatine film sticking. If there is any shadow density, or the image is more than a bare ghost, it must be reduced with a reducer, such as ammonium persulphate or sanzol—and I prefer the latter—till the density is reduced and nothing but a very faint ghostlike image is left. Then, after washing and drying, the slide is ready for painting.

The colors to be used are the special aniline colors as now sold by many firms for this and postcard coloring. I prefer to use the dry dye and make my own stock solutions, which are saturated solutions in distilled water; as very small quantities of the dyes are required, a 1-2 oz. of stock solution will last for a very long time. The medium is a solution of gum arabic; the finest white pieces should be used, and they should be rinsed with water to free them from adherent powder or dirt. The formula for this solution is:—

Gum arabic .....	1-2 oz.
Glycerine .....	20 mins
Carbolic acid .....	1 min.
Distilled water .....	2 ozs.

Suspend the gum in a small muslin bag at the top of the water, and leave till dissolved; do not press out the muslin, as this retains the dirt. Leave the bottle to stand for two or three days till all sediment has settled and then do not shake.

The brushes I use are water-color sable hair, and for small detail those known as "lark," "crow," and "duck," whilst for larger masses a flat No. 4. Besides this, one wants a painting table. I use a sheet of glass supported at the

ends by plate boxes or books—whichever happen to be handy—so that there is a clear space in the middle on which the slide rests, whilst underneath is placed a piece of white paper at an angle of 45 to act as a reflector. Several saucers or sheets of opal glass can be used as palettes.

A small blob of the gum water should be placed on the palette and then a drop of the dye solution—and for this one of the small brushes should be used—is placed by its side and the two mixed till of the required shade. To paint the slide for small detail the very smallest brush should be dipped into the dyed gum and a series of minute dots just dropped on the film, and if they do not run one into the other should be made to do so with the brush top. In no sense is there brush-work of the ordinary kind: it is, except for large spaces like trees, grass or sky, merely a matter of dots or blots of color, made to coalesce.

If the number of dyes used is large, it will be quite possible, as a rule, to find a color to match, but if not, a color can be imitated by mixing, only the effect of mixing should be tried first on plain glass, as some of the dyes will not mix comfortably, but get cloudy. Still, it is always easy to put another color over the first, when the latter is dry.

Use as little gum and as much color as you can, keep the slide flat, and always paint by artificial light, as the colors do not always look the same by day as by gas light. When the slide is finished, put away to dry flat and face up, in a place as free from dust as possible. Dust settling on the tacky surface may cause considerable trouble.—*The Photographic News*.

---

## TO BLEACH ENGRAVINGS FOR PHOTOGRAPHING.

The soiled paper, print, or engraving is to be first placed in a bath composed of a quarter of a pound of chloride of lime, and the same of carbonate of soda, to about a quart of water, and allowed to remain till the paper has regained its proper tint. Next, it is removed with the utmost care into a dish of cold running water, and allowed to remain for at least six hours, the chloride of lime being by that time removed. When the paper is thoroughly dry by exposure it must be dipped into a third bath of size and water, which will restore its firmness. Finally it is placed between printers' glazed boards and pressed through a press, which will restore the original smooth surface, in which condition it will be suitable for photographing. If prints are stained by oil, grease, coffee, candle drippings or ink, different treatment will be needed. Hydrochloric acid diluted with five times its bulk of water forms the first bath, and into it the engraving is placed for not longer than four minutes and then carefully washed as above. A grease spot is to be removed by placing the sheet between two pieces of blotting paper, or covering with powdered talc, and applying a heated iron to the spot which will melt the grease and cause it to be at once soaked up by the porous paper. Dirty finger marks are to be removed by covering them over with a piece of clean yellow soap for two or three hours, and then washing with a sponge and hot water. The sheet is afterwards dipped in weak acid and water, followed by another hot water bath, and ultimately by cold water. Ink stains are to be destroyed by dipping the paper into a strong solution of oxalic acid, and then into one of hydrochloric acid and water (one to six); finally the usual thorough wash.—*Photography*.

## Editorial Notes.

### THEORY AND PRACTICE.

The following letter from one of our subscribers is typical of numerous letters which we receive from time to time. We have printed and commented on one or two in the past year, and others have been answered by mail because they did not seem to be of sufficient interest to inflict on our readers. This, however, brings up several points on which we are glad to comment.

TO THE EDITOR.

Sir:—I have been reading the *AMERICAN AMATEUR PHOTOGRAPHER AND CAMERA AND DARK ROOM* for two years with both pleasure and profit, but have sometimes been puzzled by what seemed to be a contradiction between the articles and critical department, and many of the pictures reproduced. In fact it seems to me that many of them would have been treated with scant courtesy had they been sent in for criticism by unknown beginners, and not had well known names attached to them. So I am going to accept your invitation to criticize and point out some of these contradictions.

You say "a picture should suggest more than is seen," and "imagination is necessary," and you are certainly right as regards some photographs. Take "Blossom Day" and "Light of the World," they are nothing but suggestion and it takes a mighty lively imagination to make out what they are supposed to mean even with the aid of the title. Do painters make their figures mere shapeless masses? Of course I have seen jokes about the pictures which looked equally well whatever way you held them, but have never seen reproductions of them. The only things I have ever seen like them are the half-tones in the daily newspapers; you never can be quite certain in them that what you take for a street car is not an elephant, or what looks like a tree is not a fat woman with an umbrella. I had no idea the newspapers were so "artistic," but they seem to be quite "in it." Seeley's "Pines Whisper" puzzled me until I brought my imagination to bear on it, and then I discovered that it was not intended to be taken seriously, but as a joke. A half starved lad from some city slum has got into the country and has wandered into the woods after dark, where he is frightened half out of his wits by an owl "whispering" from the top of a pine tree, and his female companion has fallen on top of him in a faint. The joke is in the title for you know the "whisper" of an owl is rather of the nature of an "Irish whisper." There are two prints in your January number which illustrate what I mean when I say that the name of the photographer sometimes carries more weight than the print, they are "Lady in White" and "Road from Tivoli." Whitewash and soot are the only terms that will properly characterize them; they are so badly underexposed that highlights and shadows are both opaque, one a white blotch and the other a black or grey mass. What is there about "Maid of the Frontier" to suggest the title? Why not "Dairy Maid," "Maid of the Slums," "Goose Girl," or anything, in fact, rather than the title given it? The only explanation my imagination would give, was that Mr. Fleckenstein must be a spiritualist, and the photograph represents a materialized ghost, or the "Frontier" of the seen and unseen worlds. There are other prints

I might mention; "Evening Light" has a river bank that looks at least as much like snow as any of the three snow pictures. By the bye, snow in this country is white, not soot and ashes, especially where the shadows show bright sunshine as in "Intervale." A print by Curtis Bell in the CAMERA AND DARK ROOM, called "Haying" I think, was not only incorrectly named but had all the members of a group of six or eight staring into the camera. Now if you will explain why you lay down rules and principles for beginners, and then reproduce pictures in which the rules are violated and tell us to admire them, or why one man who underexposes is called an artist while another who has not made a reputation is called down, you will confer a favor on more than your humble servant. I don't want to underexpose if I can help it, but I want to understand why it is wrong for me and right for the other man.

In articles on the use of the hand camera in the CAMERA AND DARK ROOM the writers say that 1-10 or at most 1-5 second is the longest exposure that can be allowed. I usually use a tripod but have taken several in hand at 1-5, and the enclosed print is from a negative that had  $\frac{1}{2}$  second, of course I used the bulb. I think it is pretty clear.

C. W. B.

In the first place, in our criticisms, we never intend to treat any print "with scant courtesy." Pictures sent us for criticism are treated seriously, often when they scarcely deserve it. Still, the man who sends a print for criticism presumably wants the faults pointed out, if there are any, and the photograph which has none is rarely found. The nearer perfection a criticised print is, the more important it is to remove what defects may exist.

On the other hand, many prints are reproduced which have been submitted to us or sought by us from the makers, which we could not in courtesy criticise. Each has some point of merit which appeals to us or other competent judges, and is hence deemed worthy of reproduction. This does not give it the stamp of perfection. If we published only pictures which in exposure, composition, values, tones and all other points were perfect, we should have to give up illustrating the magazine. We make a selection of what is offered to us or obtainable by us, and hope to make our pictures each month representative of the present state of photography, which has not yet attained perfection.

In regard to imaginative photographs, we can only reply that the artist evidently has had an idea which he has endeavored to portray. It may be that the idea was too large for the artist to express, for the medium to adequately present, or for the beholder to understand. We imagine this last case is more common with paintings than with photographs, because no man has yet endeavored to express his whole soul through the lens, as Watts has done by means of his brush. Probably the ordinary observer finds the great paintings of the latter far less comprehensible at first glance than the most imaginative photograph. As far as symbolism is concerned, Durer's "Melancholia," an etching which was produced four centuries ago, bids fair to carry its riddle down the ages unsolved, so that photographers have precedent for the use of mystery and deep symbolism, provided they themselves understand what they are doing. We may safely say that there is no trick or affectation practiced by photographers which they have not copied from artists in other mediums, or which the artists have not seen the value of and applied to their own work.

In regard to pictures which appear equally well in all positions, our cor-



respondent does not quite understand the statement he quotes. Anyone who has frequented the studios of painters when they are working will often have seen the artist turn his picture upside down or sideways to study it. He is, however, not expecting that it will tell the story or represent the subject equally well in every position. He is studying the balance of the picture, the massing, the arrangement of spots. A fault of balance which is hardly perceptible in an upright picture, because obscured by the story it tells, often becomes very prominent when the picture is upside down and hence but a mass of meaningless spots of color. It would almost be safe to say that a perfectly composed picture, absolutely balanced in mass and color, and with all its lines harmonious and beautiful, would give pleasure to the trained eye in any position. Before me as I write hangs a Japanese print depicting flying crows. This has its spots of black so well arranged that it is a good arrangement of spots in any position, though meaningless as a picture except when upright. Japanese prints often show this quality, and for this reason, as well as for their simplicity and graceful arrangement of line, afford valuable studies for photographers.

Neither of the original pictures reproduced in our January number and characterized as "whitewash and soot" by our correspondent, deserves this reproach. Steichen's "Lady in White" is a picture which shows the full scale of tones attainable by photography, and more than a halftone can reproduce. The print shows a full range of values in the whites, which are necessarily degraded by the half-tone process, which has no pure whites. The picture is in no sense underexposed. At the other end of the scale Mr. Steichen has, by some peculiar process which is his own secret, produced a depth and brilliancy in his shadows, a differentiation of blacks, which is also impossible to reproduce. Finally the print is yellowish in tone, and an extremely difficult problem for the engraver. He has done as well as could be expected.

As to the "Road from Tivoli," the writer saw the exposure made and knows it was ample, saw the film negative, contact prints, and the enlargement reproduced. The photographic work is technically correct throughout. The engraver, however, made a most miserable failure in the reproduction, which we have already explained and apologized for. The cuts were underexposed, etched too flat, and far too shallow to print properly. The result was miserable, but we had to print the pictures, as the magazine was partly printed when the cuts were delivered, and there was nothing else at hand to fill the space. At least two other magazines printed cuts made from the same negatives, probably because under the conditions obtaining, their cuts had to be made in Pittsburgh like ours.

We wish to emphasize here most strongly the fact that in no case does a half-tone cut exactly reproduce the original print, even when the engraver has reached the limit of his ability. There is always some change in value due to the mechanical limitations of the process. Again, the engraver is not infallible in his exposures. The requirements for reproductions for a photographic magazine are quite different from those for most commercial work. The engraver is usually working for brilliancy and deep etching, so as to render the printer's task easier. This leads him to habitually slightly underexpose his negatives, and our constant fight is to counteract this tendency in his work. Another correspondent has most caustically criticised this month some snow pictures in the March number, alleging gross underexposure which did not exist in the original prints, but was wholly the fault of the engraver. It is therefore always well to

remember that criticism of a half-tone may be decidedly unfair to the original print.

Our correspondent is both uncharitable and narrow-minded in his criticism of Mr. Fleckenstein's print. The remarks in the preceding paragraph are especially applicable here, as the reproduction is very poor. We can see nothing to criticize in the choice of title, as the picture is that of a girl of the far West. As to the artistic merits, we do not stand sponsor for them. The picture was purchased for the *Fédération* on the recommendation of a jury of painters, each of whom has studied and practiced art for years, and who saw outstanding qualities of high merit in the work. If our correspondent had their talent and their knowledge, he might see with like vision. On the other hand if his theories of painting were those of the realistic school, he might not. The combat between realists and impressionists in painting is as bitter as it is in photography, and as impossible of settlement.

In regard to snow, we may say that the blackest pigment that ever was ground may under certain circumstances truthfully render snow, or pure white depict black velvet brightly lighted. Blank paper will *never* truthfully represent snow, however white it may be. All objects and surfaces must be represented by light and shade, and snow may look like "soot and ashes" and often does. The brighter the light, the deeper the shadow.

In laying down rules for beginners, we but repeat the precepts and principles found by long experience to be the most useful. There never was a rule of art which could not be violated for good reason and with due thought of the result. It is, however, better for the beginner to follow the usual rules until he knows enough to understand why they are generally the best guide of conduct. Usually figures looking at the camera are awkward. On the other hand, this device may be resorted to to express curiosity. Mr. Bell has taken pictures for many years. It is reasonable to assume that he desired to have his figures looking at the camera, or he would not have exhibited the picture.

In the policy of this magazine pictures are judged on their merits and not on the names of the makers. In our monthly contests, the prizes have been awarded on occasions to men who had never previously exhibited a picture or entered one in a competition, to the exclusion of those whose reputation is world-wide and who have had pictures exhibited on four continents and won many prizes. At the same time it may be observed that this rarely is the case, for genius does not long remain undiscovered, nor can photographic reputation be won without merit. The man who has a reputation has earned it and must continually produce good work to keep it. The beginner who possesses artistic genius will not long remain undiscovered.

Jealousy is a fault which abounds in this world and photographers have their share. It is only too often fostered by the injudicious criticism of ignorant friends, who blindly praise inferior work, because they know nothing of art, but can see a resemblance to familiar objects in work which is crude and ill done. The photographic editor, whether attached to this or any other journal, is always ready to offer absolutely unprejudiced criticism, and if he says work is bad, it is usually with reluctance, because he does not care to hurt the feelings of a subscriber, whose support is helpful to the journal. We are always seeking for undiscovered talent and glad to recognize it and help it to advance.

In regard to the last paragraph of our correspondent's letter it is pretty generally recognized that exposures of  $\frac{1}{2}$  second in the hand are impossible. The

shutter is almost certainly not working at the marked speed in the case cited. As a matter of fact, there is often absolutely no difference in the shutter speeds 1-100 and  $\frac{1}{2}$  second on cheap cameras.

We have given this letter considerable space, because we know some of the thoughts expressed in it are working in many minds. While we can rarely answer at such length, we invite our readers to freely express their opinions, or ask questions about any points which may perplex them.

\* \* \*

### THE FACTS IN A PERSONAL MATTER.

For once we make an exception to our rule to avoid personalities in this magazine to contradict a statement published in *The Photographer* of April 16th. Sidney Allan, *alias* Sadakichi Hartmann, takes it upon himself to say that he wrote the article "Art Terms Explained" which appeared in the January number of THE AMERICAN AMATEUR PHOTOGRAPHER AND CAMERA AND DARK ROOM under my name. Considering the irresponsibility of the person making the charge and the equally irresponsible publication in which it appeared, I at first decided to let it pass; but as silence gives consent I will state the facts in the case.

It may be remembered that at one time Sidney Allan Sadakichi Hartmann was a paid contributor to our pages. (Always paid and generally in advance of publication.) One day in this office I told him that I was getting up an article explaining the art terms used by critics and writers on art subjects and asked him if he cared to undertake it. He demurred, as he was to leave town the following day to attend a photographic convention, but agreed to jot down a few items if I would give him a certain amount of money. This he did do and the money was paid and the matter pigeon-holed until I had time to complete the article. When this was done and Hartmann's matter re-edited, the article was in turn submitted for approval to the other members of the editorial staff, who each added to it, so that what little of S. A. S. H. remained was hardly recognizable; and as the idea of the article was mine originally and fully three-fourths of the work, I did not hesitate to accept the responsibility.

More could be said, but it is sufficient to say that the motive for the publication of the libelous statement is the fact that, for good and sufficient reasons, our one-time contributor was notified about a year ago that never again could he write for the AMERICAN AMATEUR PHOTOGRAPHER. I will also say here, for the first time, that a certain scurrilous article which appeared in a Western photographic paper some time ago under my name was not seen by me until published and was generally understood to have been written by the man of many *alias*.

We are all the more surprised that the editor of the *Photographer* should have given publicity to the letter of Sidney Allan when we recollect how sore he felt on the occasion that Sidney fooled him into paying for an *original* article which turned out to have been lifted bodily from Hamerton's "Art Essays." That episode ended his writing for the *Photographer*, and other editors also got wise—all except the new recruit who runs that ancient magazine which still survives under the name of *Wilson's*. He has some things yet to learn.

It is hardly necessary to say, in conclusion, that Sidney Allan's letter would have been published by no reliable publication without verification of the truth of the statements.

J. P. CHALMERS.

From the middle of May until the first week in July, Mr. Frank R. Fraprie will be in Europe. During his absence communications sent to his address, 6 Beacon St., Boston, Mass., will receive necessary attention, and will be forwarded to him if required. Competition prints should be sent to the same address. Pictures for criticism and questions to be answered will receive proper attention if sent to this address.

## Our Table.

Books for review, apparatus and materials for examination and report, should be sent to any of the editors whose addresses are given on the title page.

THE FOLMER & SCHWING CO., Rochester, N. Y., advise us that they have reduced the prices on their focal plane shutters to \$22 for the 4x5 size, \$24 for 5x7, \$27 for 6½x8½, \$31 for 8x10. This is a substantial reduction on these substantial goods and should induce many of our readers to have these shutters fitted to their cameras for the coming summer's work. Since the Folmer focal plane shutter was placed on the market, several others have been compelled to withdraw entirely. For precision and durability there is nothing that equals them—ask any user of Graflex or Graphic cameras. The Graflex focal plane shutter can be fitted to nearly all makes of view or folding hand cameras.

\* \* \*

WHILE we are on the subject of shutters we must make special mention of the new improved XL "between the lens" shutter of the C. P. Goerz American Optical Co. These shutters can be regulated in speed from one second to 1-150th of a second, which is fast enough for almost all purposes, and they are made so neat and light and withal so durable that they are a pleasure to possess. They claim it to be the fastest shutter of its kind, and to prove that they are prepared to back up their statements, they offer to fit them to lenses of any make without extra charge. If you already possess a good lens with a balky shutter ask your dealer at once to have it fitted with an XL Sector. If you do not have a good lens you cannot do better than order a Goerz lens and Sector shutter complete.

\* \* \*

OFTENTIMES a figure introduced into a landscape is just the making of a picture, but on solitary rambles this is not always possible—yes, it is, if you are the happy possessor of an "Autopoze," a little device that you can carry in your vest pocket to be attached to your shutter and cause it to be released when you have posed yourself in the desired position. See their advertisement in this issue.

\* \* \*

WITH THE CAMERA, the monthly circular from the Illinois College of Photography and Photo-Engraving, is, as usual, full of items showing the progress in both departments. The engraving students have organized into a club for practice out of college hours, and have fitted up a plant for that pur-

pose, having been presented with screens by the Levy Company, and with lenses by Goerz and Bausch and Lomb.

The new Alpha Lambda Kappa photographic club is entering into friendly rivalry with the older C. C. Club and has equipped its home with an artificial light plant.

The circular tells also of visits from former students, and, what is even more encouraging, of the success of others who are meeting with great success both in studios of their own and as assistants; one, a Mexican, establishing an engraving plant under the direction of the Mexican Government. Graduation from the college seems a sure road to success, and last, but by no means least, the circular tells with almost visible pride that "the Stork" has visited the faculty no less than five times during the last three months.

\* \* \*

THE ANTHONY & SCOVILL COMPANY have opened a branch warehouse at 407 N. Broadway, St. Louis, Mo., to take care of their largely increasing trade in the middle West. Dealers who handle their goods in that locality will appreciate the saving of time and freight on their orders which have heretofore been filled from the New York headquarters. To care for the Eastern trade a wholesale depot has also been established in commodious quarters at 40 East 21st Street, New York City. This firm also announces that they are about to place on the market several things that are well worth the attention of progressive professional photographers.

\* \* \*

BURKE & JAMES, of Chicago, have purchased the camera factory of K. Nelson in that city, and there will soon be something doing in that line. Those of our readers who are interested in tank development will do well to write this firm for a copy of their booklet on "Daylight Automatic Development of Negatives." Of course this is written to create demand for their Ingento Tank, but it is good and valuable reading, and, by the way, the tank is also a good article.

\* \* \*

#### EASTMAN KODAK CO. IN ENGLAND.

The once prosperous business of Ilford, Limited, seems to be steadily declining, while that of its rivals in the manufacture of photographic materials—the Eastman Kodak Company—continues to expand. The contrast is an unpleasant one for the English company, who must now regret their refusal to be absorbed by the American company. The Ilford dividend, which used to be 12½ per cent., has steadily declined since 1902-3, the last year of that rate of payment, and for 1905-6 was only 6 per cent. It would now seem that a further reduction this year is probable, if not inevitable, for the interim distribution is reduced from 6 to 4 per cent. per annum. No wonder the shares, quoted at one time at over 30s., have fallen to half a sovereign. The Eastman Kodak Company, on the other hand, is making great progress. The dividend on the ordinary stock, increased twelve months ago from 10 to 14½ per cent., has now been further raised to 17½ per cent., while the surplus over dividends is now £232,000 as against £167,000.—*London Financier*.

## THE HALES FOCAL PLANE HAND CAMERA.

In hand cameras using a focal plane curtain shutter it is customary to employ a pivoted mirror for reflecting the lens picture image upward to the underside of a horizontal focusing ground glass. Over the ground glass is a collapsible hood through which the operator observes the image and obtains the correct focus in the usual way; then on the movement of a release lever, the mirror flies upward out of the line of the picture image from the lens and at once releases the curtain shutter when an instantaneous exposure is made. The advantage of this form of construction is that the operator sees the size and position of the image to be photographed up to the time of exposure.

The modern anastigmat lenses now made are of such fine optical quality that ordinary cameras fail to show the extreme or microscopic sharpness of the image and do not bring out the fine results that such lenses are capable of producing.



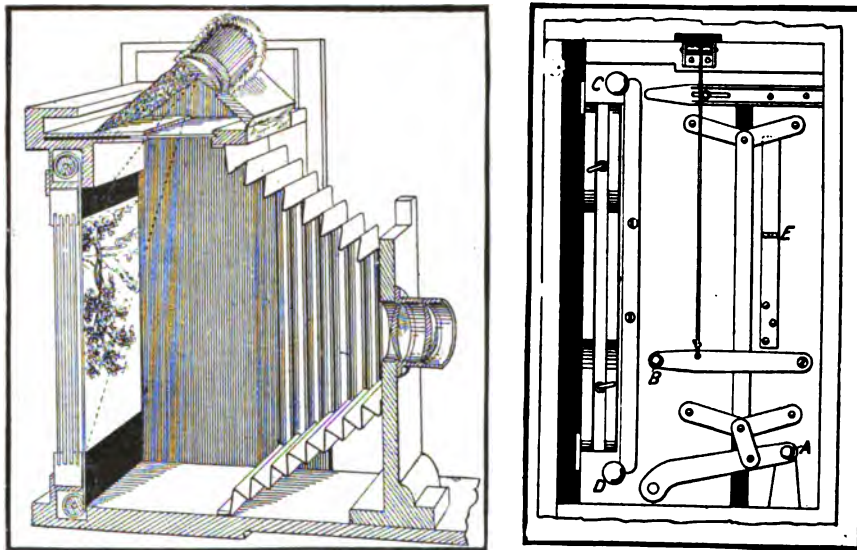
In such cameras the so-called "grain" of the ground glass interferes with the fineness of the image, and the refraction of the glass also effects its sharpness. In cameras where a mirror reflects the image, the picture is subject to distortion by any slight inequality of the mirror, and because of the distance the rays have to travel this defect is sometimes greatly intensified.

The camera shown in the accompanying illustrations, the invention of Henry W. Hales and manufactured under American and foreign patents by the Hales Camera Company, of Ridgewood, N. J., is designed to be more simple in operation than the mirror form of camera, and to be especially useful in enabling the operator to obtain and observe an accurately sharp, brilliant image projected directly upon a white focusing ground and in an apparent proper position on account of the way it is looked at.

The general appearance of the camera opened for operation will be seen in the perspective view and its novel features in the diagram views. The side

forming the front and base of the camera is dropped down in the usual way and the lens portion drawn out on to a plate provided with a rack and pinion focusing adjustment. The top of the box folds backward over the rear of the camera and as it does so allows the eye observing apertures to be elevated into position by means of a light spring below. A curved arm shown at one side of the top is actuated downward when the top is closed, thereby automatically folding the eye-piece into place, when the camera is not in use. A convenient handle is on the outside of this top piece for carrying the camera. In appearance it is like an ordinary square shaped box.

The back portion of the camera as shown in the right diagram is made in two parts, one of which is rigid and the other movable. The latter part carries the focal plane curtain shutter and the plate holder. The shutter is of the ordinary simple form with a single horizontal slot of uniform width, but a part of



its outer surface opposite the lens is whitened with a smooth, fine surface and forms, when the shutter is wound up, a perfect focusing screen, the full size of the plate, shown plainly in the left diagram.

Directly under the eye observing portion is a horizontal light cut-off slide which is kept closed by a spring and is only opened when the image is observed, by pressing down the handle *B*. This is connected by a thread passing over a roller to the lever operating the slide. In focusing the forehead rests against the eye apertures, in which spectacle lenses are located to partly magnify the image, and the operator looks backward at the image. The view is indicated by the dotted lines in the diagram. Inasmuch as the head is downwardly inclined the inverted image on the screen looks in the right position. The foreground appears at the top of the screen and the sky below. *A* is the shutter release lever. Its function is, as soon as the focus is obtained and the image located in position on the screen, to first advance the movable back and the plate holder forward until the plane of the plate occupies the same focal plane as the former focusing surface of the curtain shutter did; then a trip at the top



First Prize

Postcard Competition.

GEO. L. GILBERT

of the fixed back throws out the spring holding the shutter at *C*, releases the latter, causing the exposure to be made in the usual way. It will be seen that the shutter release *A* operates, in its downward movement, a vertical toggle bar which carries the movable back forward and closes it against the stationary back. After the exposure is made the curtain is wound up for another exposure by the knob *C*, and at *D* is another knob or shaft for increasing the tension of the actuating shutter spring. On the opposite end of this shaft is an indicator (not shown) for indicating the speed of the shutter. By the movement of the shutter lever *A* upward the movable part of the camera is pushed backward and the curtain shutter is placed in position for focusing.





Second Prize

Postcard Competition.

W. H. ZERBE

*E* is a lock for the shutter lever. In the general view it is a small button, which on being pulled outward by the fingers brings a spring stop under the toggle connection and holds it from operating. On releasing *E* it springs inward out of the way of the toggle bar.

By placing the lever *A* in a half-way position the curtain shutter may be entirely rolled up, leaving the camera open in the back for ordinary time exposures with the use of the usual ground glass if so desired. The ordinary plate holder is used. In a trial of the camera we found it exceedingly easy to obtain an accurate focus on account of the brilliancy of the image on the white shutter. The camera presents a neat and attractive appearance. All portions of the



Marshes, Gloucester, Mass.



Homestead, Boston.

Honorable Mention Postcard Competition.

MISS E. R. HOOPER  
CHARLES V. WEILER  
H. E. STOUT

WORK



A NEW ENGLAND LANDSCAPE

ALBERT S. SMITH

First in Bromide Enlargement Competition.





PORTRAIT

2d in Bromide Enlargement Competition.

HENRY HALL

metal work are blackened to prevent reflections, while the mechanism is simple, easily operated, and so far as can be made is what is called "foolproof." As the camera contains no ground glass or mirrors its weight is somewhat lighter than others.—*Scientific American*.

---

## Our Prize Competitions.

### AWARDS IN POSTCARD COMPETITION.

The post card competition brought out a large number of entries, and the judging took an unusually long time, owing largely to the fact that sets of three were required. Many of the entries had one or two very good prints, the effect of which was destroyed by a very poor print.

The judges finally picked out two sets of nearly equal merit, between which the choice was very difficult. Both were carefully printed, artistically matted, and from satisfactory negatives, and hence fulfilled the technical conditions. After long deliberation, the first prize was awarded to Geo. L. Gilbert and the second to W. H. Zerbe. Both sets of cards are reproduced. Honorable mention was given to Miss E. R. Hooper, Charles V. Weiler, and H. E. Stout. One card from each set is reproduced.

Prints for future competitions are solicited from any reader, whether or not a subscriber to the AMERICAN AMATEUR PHOTOGRAPHER. They should be sent by mail or express, fully prepaid, to Frank R. Fraprie, 6 Beacon St., Boston, Mass., to arrive on or before the date set for closing the contest. Prints for these competitions *must not* be sent to the New York office, as they are likely not to be received by the judges in time for consideration.

First and second prizes will be awarded a bronze medal in each case, with blue ribbon and silver bar, and red ribbon and bronze bar, respectively. The first award includes also a cash prize of five dollars. Honorable mention may be given to meritorious pictures which do not attain prize rank. Awards may be withheld or divided at the discretion of the judges. Pictures awarded prizes or honorable mention may be reproduced, and unsuccessful pictures will be returned if requested.

The subject proposed for March, Landscapes, closes June 1. For June, Instantaneous Pictures. For July, Pinhole Pictures. For August, Animals. For September, Marines, including Views of the Sea or Great Lakes, Shipping, Yachts and Harbor Scenes. For October, Mountains. For November, Atmospheric Effects, including Fog, Mist, Rainy or Snowy Days, Rainbows, Sundogs, Clouds, etc. For December, Genre. For January, Portraits. For February, Snow Scenes.

\* \* \*

### AWARDS IN BROMIDE ENLARGEMENT COMPETITION.

This competition stirred up quite a little interest, as there were no less than thirty entries. As was announced in our January and February issues, the conditions were: (1) the prints and negative must be the individual work of the contestant; (2) a straight contact print (without any dodging) from the negative must accompany the enlargement; (3) dodging or double printing in



CLARK'S FERRY

JAMES McCORMICK, JR.

3rd in Bromide Enlargement Competition.

the enlargement will be allowed, and they may be any size not over 16x20; (4) enlargements will be judged on the basis of 50 per cent. for technique, 30 per cent. for pictorial quality and 20 per cent. for choice of subject.

Three cash prizes of \$5, \$3, and \$2 were offered, or the AMERICAN AMATEUR PHOTOGRAPHER medal (value \$5) may be selected by the winner of the first prize, if desired.

The judges were the editors of the AMERICAN AMATEUR PHOTOGRAPHER AND CAMERA AND DARK ROOM, assisted by F. Dundas Todd, editor of the *Photo Beacon*. After much discussion, the awards were made as follows:

1. Albert Smith, Manchester, Vt.
2. Henry Hall, Vineland, N. J.
3. James McCormick, Jr., Harrisburg, Pa.

Honorable mention was given to Chas. V. Weiler, Flemington, N. J.; Dr. C. B. Piper, St. Paul, Minn.; Holley Jacobus, Verona, N. J.

The winning prints, together with the original contact prints are reproduced in this number, except in the case of the print of Mr. McCormick, where only the reproduction of the enlargement is shown, as the contact print was in green carbon, which it is impossible to reproduce with any degree of fidelity.

The first prize picture, a 20-inch enlargement from a Kodak negative, toned a rich sepia by the hypo-alum method, was selected as being the one which most closely fulfilled all the requirements of the competition. In many ways the enlargement was even better than the contact print. The second, an enlargement on royal bromide, upheld with remarkable fidelity every detail in the original and was far and away the best of all the portrait subjects. The

third award the judges argued over for a long time and when the assortment was finally weeded down to two prints, the vote resulted in a tie between the two prints and neither of the judges would yield a point; therefore, it was decided to divide the prize. When, however, the prints were turned over to learn the names of the makers, it was discovered that they were both made by the same party, so the award was unanimously given to the landscape, the other being a picture of two girls waving a salute to a passing train. In this the subject held the interest, but the values were not so faithfully rendered as in that of the landscape.

All pictures will be returned where the request was made, and any of the others that we may desire to reproduce later will be paid for at the rate of one dollar each.

---

## Our Portfolio.

---

Prints for criticism in "Our Portfolio," only one at a time and only one each month should be sent to any of the editors whose addresses are given on the title page.

2286. F. M. TERHUNE.—"Edge of the Woods," the lower part of the trunk of a large tree in the left foreground, and, in the distance, the lower parts of a few smaller trees, hardly bears out the title, nor is the subject worth the trouble entailed in its reproduction. The huge black mass, evidently of a dead tree is not worth the attention it demands, excluding, as it does, attention to everything else. The only improvement we can suggest would be to place the mass in a higher key by working with a leaded stump on the back of the negative; but the photography is so much better than the subject that you should learn "to see" before you make further attempt at picture making.—N.

2287. H. E. STOUT.—"Evening" is another of your low toned prints that does not appeal to us as at all satisfactory. A black sloop near to an equally black dock or pier, under a sky blacker than ever sky was when it was possible to photograph. The whole print looks as if the platinum paper had been exposed to light before development, long enough to make it one uniform dark grey.

2288. F. STICKNEY.—"A Misty Day In Winter." The title is a misnomer, there not being a trace of mist, nor even of atmosphere, the distance being as clear and well defined as the immediate foreground. The subject includes a creek or large stream running at an angle across the print, a mass of bare but snow-clad ground on the right with leafless trees in the middle distance on both right and left, but without one single object of more importance than another. It is just one of those subjects that, but for the snow, would not have been thought "worth a plate," and we have said again and again that the fact that they are so covered rarely if ever makes them worth photographing. The photography here is really fine, far too good to be so wasted, and we say to you as we have said to many others, study some good work on art, such as "Burnett's Essays," so that you can learn "to see,"—to know what will, and how to, make a good picture.—N.



2289

IGOROTTES WASHING.

F. J. ULMSCHNEIDER





2288

A MISTY DAY IN WINTER.

F. STICKNEY

2289. FRANK J. ULMSCHNEIDER.—“Igorrotes Washing” is hardly a subject for criticism, from a pictorial point of view at least; belonging, as it does, to “the manners and customs” phase of photography, rather than to the pictorial. From that point of view the arrangement is satisfactory, but the technique would have been very much better with a longer exposure and shorter development, thereby getting truer values instead of the unnatural excess of both white and black. In spite of that too common fault, however, the print is of considerable interest.—N.

2290. H. L. SHROM.—The unnamed print is, from a technical point of view, as nearly perfect as may be,—an excellent photograph but without any claim to the pictorial. There is no one object of more importance than another, and with about one-third of the space given to a perfectly blank foreground. You have thoroughly mastered the photographic technique and should now turn your attention to the study of art,—to the knowledge of what constitutes a picture.

2291. CARL KREBS.—“A Spring Freshet.” Although this has several good qualities, good technique on the whole, real running or almost “tumbling” water, the rare but essential atmosphere, and a more than fairly fine sky: they are all overlooked or forgotten in the wonder where the large mass of rushing water comes from. And the fault, as fault it is, has arisen from the employment of a lens of too short focus, inducing a *too near point of view*. This is so general as to have led to acceptance of the results as “photographic perspective,”



2291

A SPRING FRESHET.

CARL KREBS

reproductions in which near objects are magnified and distant objects diminished. Now, while it is true that there are subjects in which this perspective is not noticed or not offensive, there are others where the eye at once *feels* that there is something wrong, and this is one of them. The distance diminishes so rapidly, that within less than two inches from a broad turbulent stream it appears small enough to be stepped across. No doubt the stream does become narrower in the distance, but the too near point of view has made that distance appear unnaturally near and unnaturally small. It is a good photograph, and only misses being a good picture by the selection of a too near view point.—N.

2292. A. G. HOLCOMBE.—“Manhan Falls,” three prints, of which the one which received 1 minute exposure with f-16 stop and 6 times ray filter is the best. If you would enlarge this, cutting off half an inch or more on the left, you would have a good picture. The definition is excellent and the running water well rendered and we would like to see you apply your skill to more artistic subjects. For pictorial landscape work the lens you use is of too short focus for the size of plate and unless you trim your prints in each case, the perspective is very different from that which is seen by the eye.—C.

2293. H. L. SHROM sends a picture of a Mexican landscape which is a specimen of good technical work and also artistic in arrangement. The cloudless sky is no doubt common to that region. What we would suggest as an improvement is that the camera had been held lower so as to bring a portion of the near bank into the foreground.—C.

2294. FORMAN G. HANNA.—“The Silent Places” is a picture of a snow-clad landscape of more than ordinary merit. The photography is good, also the selection and treatment, altogether far in advance of any of your former pictures. We are glad to see that you are taking to heart the criticisms already given to your work and take pleasure in reproducing your picture in this number.

2295. Will the Canadian reader who sent the picture post card of a landscape with sheep please identify himself.

2296. OLIVIA T. CLOSSON. There is considerable promise in the samples of work that you send, altho, as you humorously remark, “there is something in them that is lacking.” What that “something” is, is hard to define. It is not lack of technical knowledge, as your work is far above the ordinary in this respect. It is not lack of ambition, as you say you do not aspire to be a snapshotter, but want to picture nature in her moods. It is not lack of perception, as the views are all well selected bits—possibly it is lack of conception, as I cannot reconcile your title, “Voices of Doubt and Trust,” to the charming rendering of a limpid river or lake with overhanging trees and foliage. But then, I am not a poet, only heretic enough to say that you have deftly pictured nature in charming mood and manner, but have not hit the title. In No. 2, a woodland path, covered with a carpet of fallen leaves and overhung by leafless tree branches, you have chosen a most apt and poetical title—“Hope—Take heart, thy birds are only flown, thy blossoms sleeping, tearful sown, to greet thee in a glad new year.” It would have improved this picture if you had used a larger diaphragm or other means to get some sense of atmosphere and less wiry definition in the extreme distance. No. 3, “The filmy mist lies like a silver lining on the sky,” is also apt in title, but bad in execution. To obtain the desired softness of definition, place one or more thicknesses of celluloid be-



2294

THE SILENT PLACES.

FORMAN G. HANNA

tween the negative and the paper, and not, as in this, move the print in the frame until it is a hopeless blur. Your letter and also your prints are very interesting and we hope to hear from you again.

---

## Society News.

### THE CAMERA CLUB OF NEW YORK.

A few members of the club have been interested in promoting a greater social feeling in the club by providing a Sunday afternoon Tea, during the winter months. It has created a more friendly sentiment among the members and has proved helpful in the discussion informally of photographic matters. In January the Orange Camera Club Interchange set of slides were exhibited and in March the Buffalo Camera Club set, both of which were of excellent quality. At the February meeting a nominating committee was chosen for the nomination of officers and two trustees.

Print Committee hung prints by Robert Demachy, C. Puyo, Rene Le Begne and Céline Lagnarde of Paris, as well as examples of the work of Rudolph Dührkoop of Hamburg and views of the Yosemite Valley by W. E. Dassonville.

The Annual Auction of the Club occurred on March 7th and considerable high grade photographic apparatus and materials were successfully disposed of.

On the evening of March 15th, the multiple high speed shutter invented by Mr. Gustave Dietz was explained by him.

At the regular meeting of the Club on March 12th, the by-laws were amended to reduce the number of stated meetings from ten to four in each year. The meetings will hereafter be held on the second Tuesdays of February, April, October and December at 8 P. M. The February meeting is to be regarded as the nominating meeting and the April meeting is the election or annual meeting.

The annual meeting was held on Tuesday evening, April 9th, at 8:30 p. m. and the following officers and Trustees were elected for the ensuing year:

President, Charles I. Berg; Vice-President, Chauncey H. Crosby; Secretary, John Hadden; Treasurer, Frank M. Hale; Trustees, Malcolm Stuart, Henry T. Leonard; Committee on Admission, Henry B. Reid, Horace T. Rowley, Edward Heim.

The reports of the Treasurer and Secretary showed the affairs of the club were in a prosperous condition and that the work of the members was up to a good standard. The new President in taking the chair thought there should be more exhibitions of photographic work and at least one special annual exhibition of members' work a year.

It was voted that at least 25 per cent. of the wall space of the club main hall should be reserved for members who at any time would like to hang and display any of their current work, subject to the rules of the Print Committee, the idea being to enable every member desiring to do so to display or show work to friends and others.

On the evening of April 12th the Interchange set of slides of the Pittsburg Photographic Section of the Academy of Science and Art were exhibited and was regarded as an excellent set in the quality and subjects of the slides shown.

THE BROOKLYN ACADEMY OF PHOTOGRAPHY announces that the annual exhibition of prints and lantern slides will be held this month, commencing on Friday, May 17th. This is the 21st annual exhibition of this society and those who have attended their former exhibitions will know that a treat is in store for them. The exhibition is held in the rooms of the Academy, 177 Montague Street, Brooklyn, N. Y. Take Fulton or Court Street cars.

---

## Letters to the Editors.

### USES OF A TELEPHOTO LENS.

#### TO THE EDITOR.

Sir:—Will you kindly answer the following questions: Is an auxiliary telephoto lens intended to magnify objects and so make a larger image on the plate? Does it lengthen the exposure? My camera has bellows long enough to allow me to use the rear part of my lens alone; would a telephoto be of any use to me? A friend has just got a camera, and developed his first plate a day or two ago, having got a Hydroquinone Developer and Powdered Hypo from the local photographer. He says the image appeared in 30 seconds and the plate was black in  $3\frac{1}{2}$  minutes. He placed it in hypo 1 to 4, but after rocking for two hours only the edges of the plate were cleared. He added hypo till he had it about 1 to  $2\frac{1}{2}$  and finally left it all night, and expected to find it not only cleared but bleached out in the morning, but instead of that the plate was clear but with lots of detail and still rather dark. Does powdered hypo lose strength? I never had a plate take that long to clear though I have sometimes overdeveloped badly. I had lent him an instruction book and he had helped a friend to develop films so he knew something about it. I advised him to buy his chemicals of a druggist and mix his developer according to the directions that come with the plates, and lent him a volume of the AMERICAN AMATEUR PHOTOGRAPHER.

C. W. B.

To this imposing array of questions our correspondent adds a number of others about some process mentioned in a newspaper clipping. The clipping has gone astray, so we cannot answer them this time. If they are repeated we will do our best to satisfy him on another occasion.

The object of a telephoto lens, whether a self-contained combination or an attachment for an ordinary lens, is just what our correspondent states, to produce a larger image on the plate, without using the very long extension of bellows which an ordinary lens giving the same magnification would require. The illumination at high magnifications is very feeble and long exposures are required. Using the back half of your lens alone, if it is a symmetrical one, such as the ordinary rapid rectilinear usually supplied with hand cameras of the better grades, you will get an image twice as large as if you used the whole lens. With telephoto lenses you may easily get images up to eight times as large, and with special apparatus mountains have been photographed on a large scale forty or fifty miles away; witness the celebrated photograph of Mont Blanc made from Geneva by Ferd Boissonas.

In regard to the case of slow fixing we would say that it is very evident that there was some error in the chemicals. From the account of the very slow but finally complete fixing, we would suggest that possibly sulphite of soda was

used instead of hyposulphite. There is no other probable explanation. The fact that the chemicals were bought of a druggist instead of a photographic dealer might lend color to this supposition, as we know of more than one case where exactly the same mistake was made. We cannot conceive of conditions under which dry hypo would undergo any material oxidation. We appreciate your suggestion that the perusal of a volume of this magazine was a material aid in your friend's photographic education.

\* \* \*

#### MANY PEOPLE MANY MINDS.

Editor THE AMERICAN AMATEUR PHOTOGRAPHER,

Dear Sir:—It is rather late in the day to refer to the criticism of Steichen's "Mother and Child," by W. H. B. in the January AMATEUR PHOTOGRAPHER, but it was not until yesterday that I had an opportunity of seeing the picture, and I think the trouble may be that he gave up too soon. My first impression, I must admit, resembled his; but knowing that a Steichen couldn't be guilty of making a meaningless picture, I set to work to study it, and then its significance and beauty grew on me detail by detail, until I had read the whole wondrous story, a story that began with creation and is as endless as eternity. The "halo" is the smallest part: if Steichen hadn't been speaking to the public in general he could have omitted that hint. Let W. H. B. ask himself why the baby's hand is in that position; why he is looking beyond instead of at his mother; why the mother is turned away from the beholder, with only enough of the soft curve of the cheek to give expression to her face; why the grass where she is sitting is half in sunlight and half in shadow, while that behind the baby is all light and glory; why the light falls on her as it does; what her attitude expresses—it is not adoration only; why those dark leaves are in the corner of the picture, but only in the corner. Lest W. H. B. should think my imagination has run riot, I would say in my defense that in an artist's picture a detail doesn't just happen to be there; no matter how insignificant it is, it has some reason for being or he would have left it out. I have ended by hanging the picture over my desk, and below his title I have written my own, which reads, "And hope for all the ages is."

Very sincerely,

OLIVIA T. CLOSSON.

---

## Answers to Correspondents.

Questions for answer should be sent to F. R. FRAPRIE, 6 Beacon Street, Boston, Mass., or to any of the editors whose addresses are given elsewhere. When a personal reply is desired a stamped, self-addressed envelope must be enclosed.

---

SUBSCRIBER asks for a formula for a developer for gaslight papers of a combination of edinol and metol. As far as we know, there would be no advantage in a combination of these reducers, as both are inclined to be of the soft or quick acting variety. Edinol may be substituted for the metol in any formula calling for metol-hydrochinon, with advantage to those whose fingers suffer from contact with the metol developer. Perhaps some of our other readers have experimented with a combination of edinol-metol and will be good enough to write us of their experiences.

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co., (Incorporated), 361 Broadway,  
New York.

Address all remittances and business communications to the publishers.  
The contents of this magazine are protected by copyright and all rights reserved.

---

## EDITORIAL STAFF:

DR. JOHN NICOL, TIoga CENTRE, N. Y.

F. C. BEACH, 361 BROADWAY, NEW YORK CITY.

F. R. FRAPRIE, 6 BEACON STREET, BOSTON, MASS.

J. P. CHALMERS, 361 BROADWAY, NEW YORK CITY.

---

VOL. XIX

JUNE, 1907

No. 6

---

## CONTENTS.

The Portland Camera Club.....	291
Preserving Glass Negatives—H. F. SWARTZ.....	300
Ordinary Room Portraiture—M. D. MILLAR.....	305
A Needed Revision of Development Formulae.....	306
The Working of Gaslight Papers—Part 2—(Concluded)—E. THEO BEISER .....	307
How to Make a Single Transfer Carbon Print.....	310
Focusing and Depth of Focus.....	317
Monthly Prize Competitions—Our Portfolio—Our Table—Society News —Letters to the Editor—Answers to Correspondents.	





THE HOUSE BOAT

Portland Camera Club Exhibition

S. S. SKOLFIELD

# The American Amateur Photographer and Camera and Dark Room.

---

YEARLY SUBSCRIPTION, \$1.50.

FOREIGN COUNTRIES, \$2.00.

---

Edited by Dr. JOHN NICOL, F. C. BEACH, F. R. FRAPRIE, J. P. CHALMERS.  
Published by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (Inc.), 361 Broadway, New York.

---

Original manuscript solicited and paid for on publication. New ideas, practical hints and reports of club meetings desired. Matter intended for publication in any number should reach us not later than the 15th of the previous month.

---

Copyrighted, 1907, by the AMERICAN PHOTOGRAPHIC PUBLISHING Co. (All rights reserved.)

---

VOL. XIX.

JUNE, 1907.

No. 6.

---

## THE PORTLAND CAMERA CLUB.

FRANK ROY FRAPRIE.

Our principal selection of pictures this month is from the recent annual exhibition of the Portland Camera Club, one of the most energetic and progressive organizations of the kind in New England, if not in the entire United States. Though not one of the largest clubs in point of membership, it seems to be almost entirely a society of workers. The activities of the club are manifold. It is a member of the new Print Interchange organized among the eastern camera clubs, and also of the American Lantern Slide Interchange. It has an annual exhibition, which is annually exchanged with Boston, and many of its members are exhibitors at important outside exhibitions both in this country and abroad.

The quality of its work stands very high. We quote from a letter dated Dec. 10, 1906, from the General Manager of the American Lantern Slide Interchange, Mr. F. C. Beach, to Mr. S. S. Skolfield, President of the club:

"It affords me pleasure to advise you that at the annual meeting of our full board of five managers on the 6th inst., not one of your club's set of fifty slides was refused. The whole board unanimously voted in favor of each slide. The board wished me to convey to you their pleasure in passing upon such a well-selected and well-balanced set, and regard it as a model of excellence for other clubs to follow."

The *Washington Times* criticises the Portland Club's print interchange collection as follows: "This exhibition comprises 50 photographs which have been mounted upon flexible mounts of harmonious tints and, while unframed, they have been presented in such a manner that the work has a distinctive character, and evidence careful selection of subject, judicious trimming, and a keen appreciation of the relation between the photograph and the mount. The work



NEW YORK BAY

C. F. BERRY

Portland Camera Club Exhibition

as a whole shows this society to be in touch with the most advanced development of the art side of photography. The landscapes show a painter's appreciation of line and of color. The portrait class is small and not conspicuous for its merit, or for the attempt of greater things than can well be accomplished. Some few genre studies show a modest tendency toward this line of work, but rare wisdom in not attempting the impossible."

For the history of the club we are indebted to George E. Fogg, whose account follows:

"The Portland Camera Club, of Portland, Maine, was organized May 24th, 1899, by a small but enthusiastic body of camera workers and for three years led a nomadic existence, meeting wherever it could, and holding its annual exhibitions in the rooms of the Society of Art. May 14th, 1903, however, it took a step which seemed venturesome at the time and established itself in the permanent quarters it now occupies. The enterprise that had held the club together in its precarious years asserted itself and built up a powerful organization which to-day numbers over seventy-five members and is a recognized force in amateur photography not only in its own State but throughout the entire country. Its officers, at present, are: President, S. S. Skolfield; Vice-President, J. R. Peterson; Secretary and Treasurer, O. P. T. Wish; Lantern Slide Director, H. A. Roberts; Executive Committee, O. P. T. Wish, C. F. Berry, F. W. Shaw, H. A. Roberts, G. E. Fogg, F. H. Thompson, W. J. Hoyt, A. P. Howard, E. E. Cheney; Membership Committee, P. H. Richardson, C. M. March, R. B. Hunt.



**THE GATHERING STORM**

**E. E. CHENEY**

Portland Camera Club Exhibition



A NOVEMBER LANDSCAPE

C. W. DEARBORN

Portland Camera Club Exhibition

"It is well equipped in every particular to fulfil its mission, the development of the technical ability and artistic appreciation of every individual interested in camera work whom it can reach. It has a studio with all the appliances for figure work, a fully appointed dark room, a locker and work room, and an exhibition room upon whose walls there is always hanging an exhibition, either of the club itself or of some other well known club or perhaps of some prominent single worker. Upon the tables are continually spread over twenty photographic magazines, English, Canadian, and American, for the instruction of its members. It is not alone by these passive means that it seeks to educate the enthusiast, but every Friday evening throughout the year a meeting is held at which either lantern slides are shown, a print exhibition discussed, a critique read, a talk on art given, or a social evening enjoyed; at various times during the year, club trips are made to some nearby spot, which combine practical instruction in the use of the camera and social enjoyment; and annually a framed exhibition is placed upon its walls and the rooms opened to the public. Furthermore, it has allied itself closely in a social way with the Society of Art and enjoys a mutually instructive interchange of art ideas.

"The club, contrary to the assertions of some, is most catholic in its taste and aims and has always encouraged every expression of camera work, being a member of the American Lantern Slide Interchange and the American Federation of Photographic Societies. Its very membership list testifies to this catholicity, numbering as it does among its members such well-known professionals as Lamson, McCorkle, and Thompson, amateurs from distant parts such as W. B. Post, the Photo-Secessionist of Fryeburg, and C. F. Clarke, of Springfield, Mass., together with the veriest tyros. It believes and always has that the only true course is to embrace every element it can and to assist each member in developing his own individual propensity along artistic lines—not to trammel the novice with the dictum of 'those who have arrived.' It believes that each man



REFLECTIONS

Portland Camera Club Exhibition

G. E. Fogg

has his own problem and can in turn make his own contribution and that its highest expression as a club is shown when each worker contributes his best work in his own style. Nor is it satisfied with merely improving its own members; as is shown by the recent print interchange between prominent eastern clubs which was arranged by Portland, Washington and Pittsburg. It believes that the club's policy of a mutual interchange of work and ideas among its members holds true of club as well as individuals and that the most helpful and instructive work that can be done is in just such stimulating interchange. Its word to every camera worker, in the club or out, is that

'Each in his separate star  
Shall paint the thing as he sees it  
For the God of things as they are.' "

The annual exhibition of the club this year consisted of 74 prints contributed by 22 members. We have endeavored to make a representative selection from these, and present reproductions of eleven. Owing to the color of the originals, one or two of the cuts have lost in quality, but on the whole we hope to give a good idea of the character of the club's work.

"New York Bay" by C. F. Berry is, in the original, a fine green carbon print and possesses pleasant atmospheric qualities which render it very attractive. The various planes are well differentiated, but the black spots are a trifle too evenly spaced for the happiest composition.



A COUNTRY ROAD

H. A. ROBERTS

Portland Camera Club Exhibition

Reproduced by permission of Woodbury E. Hunt, Art Publisher, Concord, N. H.

Copyright, 1907, by H. A. Roberts.

E. E. Cheney's "The Gathering Storm" is extremely simple in composition and strong in atmospheric rendering. The lines all converge at the point of major interest, which is placed with mathematical accuracy at the intersection of the thirds. The scale of tones is short and properly distributed.

C. W. Dearborn, whose work has been favorably regarded at outside exhibitions, contributes to the annual a single print, "A November Landscape," which we reproduce. A gentle river flows quietly and with beautiful reflections between low banks, fringed with bare coppice. In the distance rise the gently rounded forms of a range of hills. A lowering sky completes a restful picture in low tones, which well conveys the brooding melancholy of the season. Technically perfect and artistically a gem.

"Reflections," by G. E. Fogg, is a foreground picture. The quality of the water is well rendered, but the darks of the picture a little overbalance the light tones. If the landscape had been a trifle more open, the result might have been more pleasing.

A. P. Howard's "A Country Road" is another example of the simple landscapes in which the members of the club make their greatest successes. A brilliant sunlight falls through the trees and casts long shadows across the sandy road, which carries us through the picture to the suggested farmstead beyond.

Of J. R. Peterson's pictures we have reproduced two. "The Wave" was accepted for the Third American Salon. It strikes us now, as it did when reviewing this exhibition in our January number, as an impression of great power, a complete rendition of motion without confusing detail. "Crest of the Hill" is



A COUNTRY ROAD

Portland Camera Club Exhibition

A. P. HOWARD

a beautiful piece of decorative composition, simple in arrangement, but somewhat false in foreground values, which darken into the distance, while the reverse should be the case.

H. A. Roberts uses for his picture a title which appears elsewhere in the exhibition, "A Country Road." It is a print full of quiet beauty, the chief merit of which lies in the excellent rendition of distance, the hills in the background rising behind each other with a beautiful separation of planes.

S. S. Skolfield excels in the rendering of sky and water, and his "House Boat" is a good example of this. Here again the separation of planes is properly emphasized by tonal relations. "Wind Swept Dunes" is a characteristic and well rendered coast scene with fine clouds.

"As the Night Lowers" by F. H. Thompson owes its beauty to foreground and clouds. The picture is a composition of horizontals, with a reposeful effect, and is extremely well done.

Among the strongest workers of the club are two non-resident members, W. B. Post of Fryeburg, a member of the Photo-Secession, famous for his snow pictures; and C. F. Clarke of Springfield, Mass., member of the Salon Club, and expert in landscape photography. Mr. Post's snow scenes were one of the strongest features of the exhibition. The maker prefers not to have them reproduced, but their quality may be judged from one of his snow landscapes which we reproduced in the March issue. Mr. Clarke also felt that only the Portland members should be represented in this number, but his work is familiar to our readers from numerous examples which have graced our pages during the past year.





THE WAVE

Portland Camera Club Exhibition

J. R. PETERSON



CREST OF THE HILL

J. R. PETERSON

Portland Camera Club Exhibition



WIND SWEPT DUNES

S. S. SKOLFIELD

Portland Camera Club Exhibition

### PRESERVING GLASS NEGATIVES.

HERMAN F. SWARTZ.

The successful preservation of prints has received well deserved attention, resulting in beautiful albums to be found with every dealer, not to mention the more pretentious frames. Unfortunately no proportionate attention has been bestowed upon the preservation of the much more valuable negative. It is a simple matter to make a new print, but a new negative of the subject is often out of the range of possibility.

The Eastman Company furnishes a satisfactory means of preserving their film negatives, though at a price which some regard as beyond the means of the amateur. The preservation of plates is by no means as well provided for. The writer ventures to propose a plan as to which he desires to give the testimony of his happy experience.

The conditions to be met by a good negative file are these: It must be dust proof and scratch proof, give ample protection against breakage, allow immediate reference without handling or lifting a multitude of plates, furnish a convenient place for memoranda, and be cheap.

The market already contains the old fashioned envelope open at one end, but this fails under the head of protection against breakage; also, when the negatives are properly stowed in the envelopes, some secure and handy place must still be discovered for the envelopes with their contents. In most amateurs'



AS THE NIGHT LOWERS

F. H. THOMPSON

Portland Camera Club Exhibition

quarters they are to be found stacked up in a corner somewhere. This is far from convenient for reference. There is also to be purchased a fairly good negative file in the form of a box with card partitions and a cover. This box, however, holds only about fifty plates and costs fifty cents. To file five hundred negatives would therefore cost five dollars. The partitions are fixed, they are not convenient for notes, and the boxes have a lid so that they cannot set one on another conveniently.

The method about to be suggested may already be in use by some of the professional photographers, but if so, the writer has never heard it mentioned. It is a simple modification of the already familiar card catalogue.

If economy is a consideration, secure a "Card Index Transfer Case" of the *drawer* variety. They are made of stout press board, quite strong enough for the purpose, and cost only thirty-five or forty cents. Good examples are the numbers 35, 46 and 58 made by the Globe-Wernicke Co., Cincinnati, Ohio. The drawer is about fifteen inches long, and will hold over one hundred and fifty negatives with the necessary cards. The reason for the drawer variety of case is the much greater convenience of this form over one using a removable lid. The customary solid oak card drawers would of course be much better, and also much more expensive.

Each negative is furnished with its own catalogue card, upon the upper edge of which are to be written the name, number, printing notes, and other matter desired. The negative is placed behind this card. At convenient intervals insert



PORTRAIT OF THE LATE  
PROF. HUBERT ARNOLD

Bassett, Photo., N. Y.



HOME PORTRAIT

Malcolm Dean Miller

U. S. N. A.



HOME PORTRAIT

Malcolm Dean Miller

Mrs. U.

a guide card with its proper notation. The only caution is to be sure to place the glass side of the negative against the side of the card on which the writing is and thus avoid any danger of copying on to the gelatine of the film.

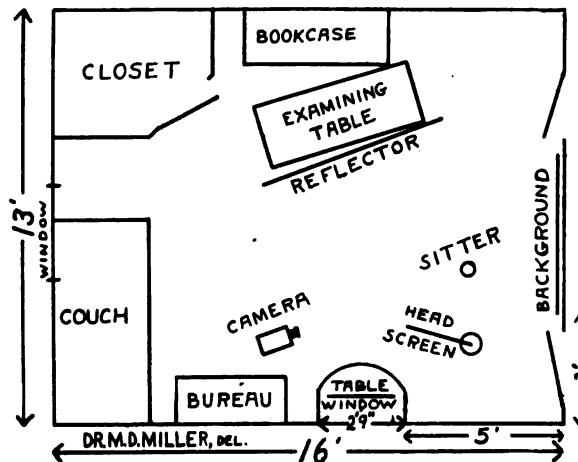
The expense for one hundred and fifty plates should be about as follows: one case, 40 cents; 150 cards, 22 cents; 10 guides, 8 cents; total, 70 cents. The 3x5 case can be used for  $3\frac{1}{4}\times 4\frac{1}{4}$  plates, the 4x6 for 4x5 plates and the 5x8 for 5x7 plates. It will be found better for the first two sizes mentioned to use the case next larger, while the 4x6 is just right for the European size plate of 9x12 cm.

### ORDINARY ROOM PORTRAITURE.

By MALCOLM DEAN MILLER, M. D.

For some years past the writer has made occasional portraits at home, but never with very gratifying results, until last winter. The difficulties of harsh lighting from badly located windows, and the lack of any but improvised screens and reflectors made portraiture too unsatisfactory. Last year, however, on moving to a new office, I was fortunate in obtaining a room well adapted to the purpose, and was encouraged to fit it up. The diagram which I send herewith gives a good idea of the arrangement.

My first purchase was one of the cheap iron centre stands which takes my  $6\frac{1}{2}\times 8\frac{1}{2}$  view box nicely. Next I got a plain gray ground five feet by eight feet, to fit the only available wall space, and secured it by push pins. For \$1.50 I picked up the iron base of a head rest, and a professional friend let me have a large cheesecloth-covered hoop with a stick, which held it in the fitting of the stand. A discarded wooden frame six feet square from the same friend gave me a convenient reflector after I had tacked a sheet on it. A low-priced vignetter to attach to the camera stand completed the outfit, the total cost of which was, roughly, twelve dollars. This year I have remounted the background on a wheeled carrier, which cost \$4.75 "knocked down" at the stock-house. This arrangement allows the ground to be used in lieu of a hospital-style screen, and the stand also comes in handy as a portable table for office use. When a case of which a photograph would be desirable is at hand, it takes only a few





minutes to convert the back office into a studio and get the picture with a minimum of trouble. While the above bill of expense may seem rather large to the amateur, it must be said that it is slight when compared to the satisfaction of getting good results. The comfort of even a cheap camera stand mounted on castors is in great contrast to the troubles incident to the use of a tripod, even when the latter is provided with a stay. The reflector and the head-screen are indispensable to good work with the harsh light from one window.

On a bright day between one and two exposures at F. 8 will average 2 to 3 seconds with the fastest plates. My lens is an eleven-inch Cooke Ser. V, which gives at will microscopic (but not wire-drawn) definition or any desired softness. The curtain is drawn over the window in the back of the room and several thicknesses of cheese cloth pinned over the lower half of the light. The bottom of this latter window is two feet nine inches from the floor, the top six feet higher. The width is two feet nine inches.

The annexed illustrations were made in this room, and represent average results. Both are considered very satisfactory by the young ladies. For the girl with the veil I used both windows, and exposure was about three seconds. A special portrait formula of Edinol was used, and the negatives are untouched.

---

#### A NEEDED REVISION OF DEVELOPMENT FORMULAE.

Some recent experiments having shown most clearly that development stain in a large number of cases is due solely to the use of stale alkali solution containing sulphite of soda, we turned to the "British Journal Almanac" to see whether this combined accelerator solution is in common use. As a result we noted no less than twenty-five formulae in which such a mixture is prescribed. Four of these are ortol, and two metol, formulae, and we are unable at present to say whether the effect is detrimental or not in the case of these two developers. Of the rest four are hydrochinon, and fifteen are pyro formulae, which are the two developers we have more particularly experimented with. As these formulae are recommended by twelve of the best known plate makers, it appears that the evil effects resulting from the mixture of soda sulphite with the alkali are by no means generally realised. For some reason or other, pyro stain seems now to be looked upon as an inevitable result of using pyro, though the falsity of this assumption must be evident to those familiar with the old-fashioned pyro-ammonia developer, which gave as clean negatives as anyone should wish for. As a matter of fact, stain can be just as easily prevented with pyro-soda if the sulphite is left out of the alkaline solution and put into the pyro bottle instead. A sufficiency of sulphite will always prevent stain, but sulphite that has been kept in solution with an alkali is quite useless. The same thing applies to the hydrochinon developer. A developer that has been made up for some time often turns a dark brown very soon after the two solutions are mixed, and it then stains the plate badly. This is commonly attributed to the deterioration of the stock hydrochinon solution, whereas it is really due to that of the alkali solution. With a fresh alkali solution the developer will work as well as ever, for the hydrochinon stock solution does not easily go wrong. As a stale alkali solution also serves, provided it contains no sulphite, it is evident that the sulphite, and not the alkali, is to blame. What happens to the sulphite when it is kept in combination with an alkali is by no means clear, but the fact is evident that it becomes useless as a preventative of stain while the evidence points to some change that is actually provocative of that effect.—*British Journal of Photography*.

## THE WORKING OF GASLIGHT PAPERS.

BY E. THEO. BEISER.

PART II.—Concluded.

## PRINTING.

When a negative has the qualities suggested in an earlier section of this article, little trouble will be experienced in obtaining a pleasing print, regardless of the paper selected, providing of course one stays within reasonable limits. The making of such negatives is rather unusual to the novice, however. Therefore, he must look forward to the ingenious manipulation of the positive for assistance. There are many ways of "dodging" with these papers, especially in the printing.

Some emulsions when given a short exposure to a strong light produce a softer print than the same if exposed to a weaker light for a longer time. What may be considered identical, is to increase or diminish the distance between the light and negative when printing. In taking advantage of this fact we print a weak, thin negative at a greater distance from the light than we would one of normal density and contrast; while a hard or over-developed one is placed quite close to the source of illumination. Some workers advise the use of colored glass, usually pale yellow, for the same purpose, a piece being held between the light and frame during printing. I have found no marked advantage in this method, and it is without success unless the colored glass harmonizes perfectly with the paper being used, just as the ray filter must fit the plate for the best results.

In printing at different distances from a light it is of importance to acquire an understanding of its intensity at some particular distance, thus leaving the estimation of an exposure dependent entirely on the density of the negative (the speed of the paper being known from Table No. 1).

To acquire this understanding some constant distance from the light must be chosen at which to make all test exposures. Twelve inches is probably the best, as this is a sufficient distance to allow of close calculation for shorter distances, and yet not so great as to cause excessively long exposures, excepting in cases of very dense negatives, or a weak printing light.

To be able to print a negative at various distances from a light, without successive testing, it is only necessary to know the exposure required at the selected distance, i. e., 12 inches, and apply the law which governs the intensity of light, viz.:

The intensity of illumination produced by a source of light on any object varies inversely as the square of the distance of the object from the source.

The following table has been computed in accordance with this law. By using it the calculations are simplified, and it will be found sufficiently accurate for all practical work.

TABLE NO. 2.

Comparative Intensity of Artificial Light at Various Distances.

Distance	3	6	9	12	15	18	21	24	30	36	48	60	72	84	96
Intensity	1-16	$\frac{1}{4}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	4	6	8	16	24	36	48	64

The figures opposite "Intensity" show the comparative intensity of a light at the given distances. It is easily seen that the intensity at 12 inches is 4 times

as great as at 24 inches, and inversely, one-sixteenth as strong as at 3 inches. To use this table with identical results, at all times, the conditions must be uniform, i. e., some method must be devised by which the light may always be of the same intensity, and a permanent marking off of the inches (from the core of the flame) should not be neglected.

Even illumination may be assured by placing the negative at a distance from light at least as great as its diagonal—a 4x5 negative at 6 inches; a 5x7 at 9 inches; an 8x10 at 12 inches, etc. It may occur that a print from an extremely dense negative is to be made, and the exposure at a distance of its diagonal from the light would require several minutes; and, too, probably several tests are required before the correct exposure is found. This means considerable time wasted, a disadvantage if one has quite a number of prints to make in a single evening, so we resort to the table just given and proceed as follows, supposing the case to be a 5x7 negative, rather flat, but of good density, requiring a slow, contrasty working paper:

We place a small strip of the sensitive paper in contact with an important part of the negative and print it at 3 inches from the light—taking care to have that part of the negative backed by the test strip on a level with the flame. We give one minute exposure, which, upon development, proves to be correct. Now, in the table we find the relative intensity of light at 3 and 9 inches, respectively, (the latter distance being the diagonal of the negative), to compare as 1 and 8, thus, the exposure at 9 inches being 8 times as great. As it required an exposure of 1 minute at 3 inches, it is quite evident, then, that it will require 8 minutes at 9 inches.

#### VISIBLE FIXING.

Including all processes, I believe most prints which are not permanent are due to carelessness in fixing. Either they have been insufficiently fixed, from being left in the bath for too short a time, or from age and much use the solution has been decomposed and does not accomplish its work properly. Sodium thiosulphate (hypo) acts upon the chloride and bromide of silver by first forming an insoluble double silver thiosulphate, which is afterwards converted into a soluble salt, providing there be a sufficient excess of hypo present. Should it happen, then, that the fixing bath is too weak, or has become saturated with the double salt obtained from prints previously fixed therein, the silver salts are not wholly dissolved and are affected by exposure to light. There are also several conditions which effect the solubility of these salts in hypo; for instance, they are more readily soluble in a warm solution, consequently in the summer months the prints are fixed in a shorter time than under like conditions in the winter. Again, a definite amount of hypo will always dissolve a definite amount of silver halide under the same conditions, hence, a concentrated bath will take up more than one considerably diluted.

From a careful study of the foregoing, it is obvious that an infallible method, by which the exact determination of fixing is made possible, must be of great value if we require permanent prints. Those parts of the emulsion which have been acted upon by light, are, on the application of the developer, reduced to metallic silver, while the remaining portions, which were protected from light by the opaque parts of the negative, still remain their former white color.

Silver combines with halogens and acids, forming salts, some of which have strong colors. We may take advantage of this by converting the white, unchanged chloride of the print into a colored compound, which, by the con-

trast between it and the paper support, makes it possible to note the progress of fixation, providing of course, a silver salt be selected that is soluble in hypo. An addition of potassium iodide to the developer causes the formation of yellow silver iodide, in such proportions of the positive only as ordinarily remain white. This also prevents the formation of abrasion marks during development.

The amount given in the developer formula above is not calculated theoretically, but was ascertained by experiment. An amount much below that is not effectual for the prevention of friction marks, while an excess was observed to prevent reduction. This latter reason prevents the developer being used for developing negatives or paper containing much iodide already, as for instance, Carbon Green Artura, which may be distinguished by the yellow color.

When the developed print is put into the fixing bath, it will be noticed that the color disappears from the edges first, the center being the last affected. Hence, when examining the print to determine whether or not it is completely fixed, particular attention should be given the center. This also explains why a large print requires more time to fix than a smaller one.

On theoretical grounds it appears that the print should remain in the hypo bath for some time after the yellow iodide has disappeared, to allow for the solution of the insoluble double thiosulphate first formed.

Actually, I have found that prints removed from the fixing bath immediately upon the disappearance of the yellow iodide contain no trace of silver thiosulphate on chemical analysis; and after being exposed for some eight months to every conceivable atmospheric condition, showed no signs of change. Hence, we must regard the formation of the soluble double salt as taking place immediately upon the conversion of the iodide into thiosulphate. Even though this be the case, it is not to be understood that the print must necessarily be removed from the bath at the exact instance of disappearance of color; on the contrary, it is well to allow it to remain therein for a short while afterwards as the iodide directly surrounding the shadows cannot always be well seen.

When manipulation takes place in a yellow light, as that of a kerosene or ordinary gas burner, it becomes more or less difficult to ascertain the presence of this color, therefore, in such instances we must resort to rule. A pint of 20 per cent. hypo solution will fix about 1,500 square inches of gaslight paper. Dividing this amount into three equal parts, allow the first 500 square inches to remain in the bath 15 minutes, the second 20 minutes and the third at least 25 minutes. If a roughly estimated record be kept of the square inches fixed each time the bath is used, this method will be found quite successful. Of course the prints must be kept from adhering to one another by constant agitation. It may not be amiss here to remark that test strips should not be left in the fixing bath with other prints, as they tend to adhere, causing unfixed portions. Should it happen during working, or even after the prints have become dry, that some of the yellow color is noticeable, it is only necessary to refix them. And when a close observation of the print reveals no color anywhere it is fixed, chemically, absolutely fixed. In conclusion it may be well to state that in all instances and at all times an acid fixing bath should be used.

#### WASHING.

We have now to consider the last important steps in the manipulation of the print, i.e., the elimination of hypo from the fixed print by washing and when permanence is important this must be carefully done.

Some time back I directed my attention to the various reagents proposed for chemically destroying hypo and out of the thirteen investigated but two were found to be of any considerable value. Even these I shall not name here, as from the amateur's standpoint, they would be of little value. In fact, I should never employ them unless some special result must be attained. We shall therefore concentrate our attention on plain water, which by all tests has proven the best when used correctly.

There are numerous inventions on the market for washing prints, which keep them well separated and always in fresh water, and so reduce the usual time required for this operation. When time is of no great consequence there is probably no better plan than the following. As the prints are handled separately and with care, there is no danger of their becoming doubled or torn as is often the case with those washed in a mechanical washer.

Two containers considerably larger than the prints to be washed, and at least four inches deep, are filled with clean water. The prints, when removed from the fixing bath are, one at a time, placed in either of the containers, emulsion side downwards. After four or five minutes' soaking, they are transferred to the second container, being placed therein face up. The reason for this procedure is this: Hypo is heavier than water and sinks; it must be removed from the support as well as the emulsion itself, hence the reversal. After each change of prints, the basin is completely emptied of its contents and refilled with fresh water and the prints again transferred. This operation is repeated eight or ten times in the course of half an hour. At the end of this period the water should be tested for the presence of hypo, by catching the drippings off the corners of several prints in a small beaker or graduate. To these drippings add an equal quantity of a stock solution composed of potassium permanganate, 1 grain; water (preferably distilled), 21 fluid ounces. This gives approximately a 1:10,000 solution, possessing a distinct purple color. In detecting hypo this reagent is easily sensible to 1 part hypo in 40,000 parts of water, less than 2 grains of hypo to the gallon.

When hypo is present in even such a minute proportion as this, the potassium permanganate solution changes from a deep pink to a salmon color in the course of 30 seconds. And when it is present in the proportion of 1 to 30,000 the solution becomes wholly decolorized. If the wash water contains as much as 1 part in 20,000 the color is discharged immediately, changing first from pink to a colorless solution, and thence assuming a yellowish green cast, of an intensity dependent upon the amount of hypo present. Though the delicacy of the test could be increased, it would require considerable skill, as the reaction colors become exceedingly difficult of detection in highly diluted solutions. This is quite unnecessary, for a bath containing so small an amount of hypo as 1 part in 40,000 could not do any harm to a photographic print. It is hardly necessary to remark that if a distinct indication of the presence of hypo be observed, the prints must continue in the washing water until no such evidence is found.

---

Always, whenever possible, take several shots at the same incident, but slightly different from each other. No exception can then be taken to them by the editors if reproduced in different papers.

A dilute developer with an increased quantity of alkali should be used for under-exposure and extreme contrasts.

## HOW TO MAKE A SINGLE TRANSFER CARBON PRINT.

The following instructions for the making of carbon prints from the pen of J. Waygood are so clearly written and to the point that we reproduce it in full from *Photography*. We specially recommend the article to those who would like to try their hands at printing in carbon for the first time.

"I should like to try the carbon process," said a photographer in my hearing one day, "but it wants such a lot of fresh things to start." There is no doubt that this impression has got about very generally, due possibly to the well-meaning action of a firm making carbon tissue, which has advertised a complete set of apparatus for carbon printing; but there is equally no doubt that it is based on a total misconception. I am quite sure that every reader of these pages who is also a photographer could turn out first-class carbon prints without the purchase of a single piece of apparatus to supplement what is already in his possession, except perhaps a squeegee, while the materials are also extremely limited in cost and variety. Let me deal first, then, with

## THE REQUISITES.

These consist of some *carbon tissue*, some *transfer paper*, a sheet of glass, a flat rubber squeegee (which may be extemporized), an ounce of *potassium bichromate*, some ordinary *alum*, dishes, and plenty of hot water: nothing more beyond a negative and a printing frame. It must be a very poorly-equipped amateur who has not most of these at his disposal. I have put in italics the things he will probably have to buy. Carbon tissue is sold in rolls and in cut pieces, of different colors. A packet of cut pieces of the size he proposes to work should be purchased, and the best color the beginner can get is "engraving black." The transfer paper first used should be "smooth." The squeegee required is a flat one, and not a roller. My own squeegees—and I have several—were made out of the inner tube of a bicycle tire when it got past service in its original capacity. A smooth piece of tube was selected, of the requisite length, cut open, its inner surface covered with rubber solution, and then folded up so as to make a flat piece of double thickness with one edge rounded. About half of its total width was then held between two pieces of wood screwed together to form a handle, and thus an excellent squeegee was made. Personally, I prefer my home-made squeegees to the bought ones, or I should not have troubled to make them, as a squeegee can be purchased for a small sum. It is well to get a fairly long one, as it can be used for any size.

Let us suppose, then, that these materials have been got together, and that on the first available Saturday afternoon the photographer means to try his hand at carbon printing. The night before he will proceed to make his preparations. He must first sensitize his tissues. Tissue can be bought ready sensitized, but as it keeps very badly in this condition, it is much more economical to buy it insensitive, and to sensitize a few pieces from time to time as occasion demands. The sensitizing is quite a simple operation. The ounce of potassium bichromate is dissolved in seven or eight ounces of hot water, and is then diluted to make half a pint. This is our stock solution, and it will keep in an ordinary corked bottle for any length of time without deterioration. This is diluted for use, one ounce of stock solution being diluted to make five ounces altogether. The diluted solu-

tion also keeps equally well, and there is no reason why the weaker solution should not be made up at once, if we have a bottle large enough to hold the fifty ounces of liquid, which will be the bulk of the solution of one ounce of the bichromate. In another bottle we may make up a five per cent. solution of alum (one ounce of alum dissolved in water to make one pint). Hot water is best used, to facilitate solution. This alum solution also keeps quite indefinitely. When the bichromate solution is quite cold we may proceed to sensitize some of the tissue.

In order to keep down the list of necessary materials as much as possible. I have described a sensitizing bath consisting of a plain solution of potassium bichromate. Many experienced carbon workers use nothing else, and in the past I have employed it repeatedly, with excellent results. But the bath I now use is in my opinion much superior, and I now use no other. I give the method of making it up for those who care to adopt it. It is a little more complicated but not much. The ounce of potassium bichromate is dissolved in half a pint of water, as described above. Two drams of citric acid is dissolved in four or five ounces of water, and this is mixed with the bichromate. Drop by drop strong ammonia is then added to the solution with constant stirring, and at a certain point it will be noticed that the orange color of the liquid changes to a pure yellow. The addition of ammonia is then stopped, and the liquid diluted to make a total bulk of fifty ounces.

#### SENSITIZING THE TISSUE.

Some of the dilute bichromate is poured into a clean dish. It is well to use plenty of solution, as it can be bottled up again afterwards if preferred, and in any case it is very cheap. A watch should be laid near the dish, and then taking a piece of tissue it is quickly drawn under the surface of the bichromate, prepared side upwards. If any bubbles of air are to be seen clinging to its face they may be broken by touching them with the finger. It is then turned over and any bubbles on the back are broken in the same way. It will tend to curl up at first, but may be prevented from doing so with the fingers and will soon become quite limp. The time when it was first immersed should be noted, and when it has been in for three minutes it should be taken out, laid face downwards on a clean piece of glass, and the squeegee passed lightly over the back of it once or twice to remove any excess of the bichromate solution. It is then hung up to dry by a pin through one corner, and the sensitizing of the next piece is put in hand in exactly the same way. When as many pieces have been sensitized as we are likely to use the next day, we may sensitize, in exactly the same way as the tissue, half as many pieces of the transfer paper, and these also are hung up to dry. The drying of all must be done in the dark. A dark cupboard is a very good place; or, if one is not available, the tissue may be hung up in as large a cardboard box as can be secured. If this before use is thoroughly dried in front of a good fire, the tissue will dry much more quickly in it than if the box is used undried. If we are sensitizing at night, it is a good plan to leave the tissue drying in the open air of the room, only putting it in the cupboard or box last thing at night, to guard it against the daylight. The sensitized transfer paper must be protected from light in the same way as the tissue. Sensitizing may be done in any light, broad daylight if we will, as the wet tissue is not injured by light—it only becomes sensitive as it dries. Those who have ferrotype sheets

or pulp boards at hand may if they like squeegee the sensitized tissue face downwards on them to dry. Drying will take longer, but there is then no need to do it in the dark, the ferrotype sheets may be left about in an ordinary room without harm. The tissue leaves the ferrotype with a fine gloss which is certainly an advantage in printing, and the sensitive surface is protected from contact with the air while the tissue is drying, which is itself a good thing. The transfer paper, in any case, is best dried in the dark, but as its coating of gelatine is very thin, it will dry very much more quickly than the tissue.

There is very little that need be done to prepare a negative for carbon printing. It is best to give it a safe-edge, as it is called, especially when it is to be printed by a novice at the work, because this will serve as a protection against accidental injury. Later on, we may find that in many cases a safe-edge is not necessary. A safe-edge is nothing more formidable than an opaque border on the glass side of the negative, so that the extreme edges of the print we develop shall be plain white. The safe-edge is applied to the glass side rather than to the film side, because we want a slight vignetting action where the white edge passes into the picture, in order to secure the full advantage of the safe-edge. There are several ways of applying a safe-edge. My own plan is to cut some strips of black paper about an eighth of an inch wide, damp them so as to make them quite limp, and then gum them and put them around the negative. There is only one caution necessary, and that is against allowing the paper to overlap at the corners. If it does it may lead to breakage of the negatives. The two strips should be neatly fitted together, but nothing more. A brush charged with Indian ink or other black paint, or with Brunswick black, may be run round the edge in the same fashion. Another method favored by some carbon workers is to take a piece of clean glass the same size as the negative, and to put the safe-edge on that. This glass is then put into the printing frame first, so that the safe-edge on it is in contact with the glass side of the negative when this is put into the frame. The advantage of this method is that one safe-edge for each printing frame in use will be sufficient, and it is perhaps the best plan of all.

The provision of a safe-edge to each negative we are going to print will complete the preparations that can be made beforehand; and the would-be carbon printer can then go to bed, hoping that the next afternoon may be fine, and that that special Providence that seems to watch over photographers' first attempts (and often causes them to be much better than their second or third) will assist him when he comes to the second and final stages. I think that my readers will agree with me that so far there has been nothing calling for any unusual degree of skill or practice, nothing particularly involved, nothing, in short, that need frighten anyone, however new to photography, from attempting the process. They may take my word for it, that there is nothing in the later stages either that need discourage them.

#### PRINTING THE TISSUE.

The auspicious moment has arrived. The afternoon is fine, the tissue is dry, the printing frames and negatives ready, and we set out to make our first carbon prints. For each negative that we are going to print we must select a companion negative, which previous experience, or, failing that, our judgment, tells us would require about the same exposure to give a P.O.P. print. It is not a difficult matter to make a pair of negatives by picking out a second one that



we are not likely to want for the time being. The first negative, with its safe-edge, is put in a printing frame, a piece of the sensitive tissue, coated side downwards, is laid upon it, and the back of the printing frame is inserted. In another printing frame we place the second negative, and on it we put one-half of one of the pieces of sensitized transfer paper, with its gelatine or coated side next the film; and then, putting in the back of this frame also, we expose the two, side by side; in some place where there is a good diffused light, but not to direct sunshine. The second frame is put out to enable us to ascertain how printing is progressing, because we cannot see any visible change on the surface of the carbon tissue on account of its black color to start with. It follows, then, that there is no need in carbon printing to use a printing frame with a hinged back. If the supply of printing frames is a small one, we may extemporise a frame by putting the tissue on the negative, backing it up by a few pieces of blotting paper cut to size, putting a piece of glass or spoiled negative on the back of this, and fastening the whole together with spring clips or even with elastic bands at the edges. The hinged back printing frame is wanted for the second negative with the transfer paper, because this must be watched to show how printing is progressing.

#### TRANSFERRING THE PRINT.

A visible image soon makes its appearance on the transfer paper. Printing must be allowed to go on until there are signs of the detail even in the highest lights of the guide negative. I cannot say more than this at the present moment. When the photographer judges that this stage has been reached, he may take in the frame containing the carbon tissue, and will do well to develop the print before making a second. The guide print should be taken in at the same time and put in a dark place, until we see if the exposure was correct or not. A piece of unsensitized transfer paper is now taken, and a pencil mark made on the back or uncoated side to prevent any mistake. The transfer paper must be cut a little larger than the tissue. If cut pieces are bought it will be found that this has been allowed for. It is then immersed in cold water for three minutes. At the end of that time the piece of carbon tissue is also immersed in the water, and is closely watched. It will at first curl up, with its black side inwards, but in a few seconds it will show signs of opening out. As soon as it does so, it must be turned over, so that its black side is in contact with the coated side or face of the transfer paper, and the two are withdrawn together at once and laid. carbon tissue uppermost, on a sheet of glass. The tissue is then gently squeegeed into contact with the transfer paper, putting the squeegee across the middle of the print, and stroking outwards in each direction in turn. There is no need to use force in squeegeeing, nor is there any need to interpose sheet rubber or other material between the print and the squeegee. When there is no doubt about good contact having been secured all over the print, a few pieces of blotting paper may be laid upon it, and a piece of glass or wood or other flat object placed on top, so as to leave it under gentle pressure for a quarter of an hour. It will then be ready to develop. For this purpose we want nothing more elaborate than a dish and plenty of warm water.

#### THE BEGINNING OF DEVELOPMENT.

The quarter of an hour having elapsed, the print on the transfer paper is removed from the glass on which it has been lying, and is slid into a dish of

warm water. It should not be bent about much in this process, or the tissue may be separated from the transfer paper along its edges, and that is what we want to avoid as far as possible. The water in the dish should be comfortably warm. The temperature one would choose to wash his hands in is about what is wanted; and, although books and papers on the carbon process give particulars of the temperature, to be ascertained with a thermometer, the regular carbon printer will not be likely to use any other guide than his fingers. If he cannot bear to leave his hands in the water, it is too hot. If it does not feel decidedly warm, it is too cold. Let that suffice for the present. Into water of this temperature, then, the print is slid, carbon tissue uppermost. If it tends to float to the top, it is pushed gently under with the fingers. After the lapse of half a minute or so, the black coating will begin to dissolve in the warm water, and will ooze out at the edges of the print. This stage should on no account be hurried. No harm will result if it is left untouched for a minute or two after the pigment is seen to be coming out at the edges; and, indeed, anyone not familiar with the process will find that he is less likely to fail if he gives the tissue a full two or three minutes in the warm water before commencing to strip.

#### STRIPPING OFF THE BACKING PAPER.

The next operation is to remove the paper which forms the backing of the carbon tissue, leaving the picture, in an undeveloped condition, on the transfer paper. To do this, when we are quite sure the time is ripe, as described in the foregoing paragraph, we gently raise one corner of the paper with the point of a pin, and then, catching hold of it with the fingers, we bend it right back, and with a smooth, even motion peel it off. It may seem rather a brutal sort of treatment, and one that must inevitably injure the delicate surface of the print underneath it, but it is not so in reality. Moreover, it is not one to be carried out in a nervous or hesitating manner. I do not advise anyone to be rough about it, of course, but he should not fiddle about, but strip it quickly and straight away. The paper as it comes off may bear signs of the picture or it may not; it may also show what seem to be bubbles and blemishes from which the photographer may be led to suppose his print is a failure. It by no means follows that it is, and he can throw away the paper and disregard its appearance entirely, concentrating his attention on the transfer paper, which now lies in the warm water, with a mass of slimy-looking pigment upon it. This mass contains the picture, and is very delicate. From now onwards to the finish no solid matter must come in contact, however gently, with the face of the image.

#### FINISHING DEVELOPMENT.

The water in the dish will by this time have cooled somewhat, so a fresh supply at about the same temperature may be mixed in a jug, and, the dish being emptied, the contents of the jug may be poured in a gentle stream over the face of the print. The chances are that the picture will almost immediately begin to make its appearance, by the excess of the pigment washing away where it is not required to form the image. We may continue to pour the water gently over the print, returning it to the jug from time to time for the purpose; or we may turn the print over and allow it to float face downwards on the warm water, and in this way it will develop itself. We must not make any attempt to stop developing when the print seems of about the right depth, as, if so, we shall get curious greasy-looking spots, indicating that development has not been

finished. On the contrary, we must go on developing so long as the warm water seems to be dissolving anything from the print. In this way only shall we be able to tell whether the exposure has been correct or not. When we think development is finished, we give the print a rinse in cold water, and, putting it in another dish, we cover it with the five per cent. alum solution, and leave it there for a quarter of an hour.

#### WHAT THE FIRST PRINT TEACHES.

The print may now be regarded as finished, from its appearance we can judge whether or not the exposure has been correct. Assuming that the negative was a good one, and a vigorous negative is essential for carbon work. if the print has a pale, washed-out look, printing was not carried far enough; if it is dark and heavy, printing has been carried too far. By looking at it and then noting the appearance of the guide print we made on the sensitized transfer paper, we shall be able to decide how deep to carry printing the next time. The photographer will be very unlucky if, his negative being a good one, his second attempt does not give him a print which will please him. The first guide print may be kept handy, in the dark, and compared from time to time with the second guide print.

#### A POSSIBLE SOURCE OF TROUBLE.

There is just one possible source of trouble, possible but not probable, that may be pointed out. With a very bad sample of potassium bichromate, or with tissue that is dried in air contaminated badly with fumes from burning gas, the coating may become insoluble without any exposure to light at all. This generally manifests itself by the tissue refusing to adhere to the transfer paper. To make sure the tissue is not in this condition, we may, before printing, cut a narrow shaving off one of the pieces and put it in cold water for a minute or two, until quite limp. If we then put it in warm water, and the coating dissolves entirely, it is in good condition. If it does not dissolve, the tissue is useless. It is not at all likely that this will occur, but I mention it here in case any beginner should be so unfortunate as to find his first attempts failures from such a cause. If he has tried the tissue in this way and found it to be in good condition, and still his print will not adhere to the transfer paper, either it is very much over-printed, or, what is more likely, he has left it soaking in water too long before squeegeeing it to the transfer paper.

#### THE COMPLETION OF THE PRINT.

There will be a slight yellowness about the whites of the print when development is finished, but the alum bath will remove this, and will at the same time harden the film forming the picture. A quarter of an hour is quite long enough for the print to be left in the alum, and it may then be washed in a few changes of water and pinned up to dry. A quarter of an hour's washing in four changes will be found ample. The print can then be trimmed and mounted in any way that seems desirable. It will be perfect in tone; that is to say, it will be the same color in every part; there can be no toning troubles in carbon work. It will be absolutely permanent; that is to say, the picture will last as long as the transfer paper itself. It will be found to differ in one way from other prints, namely, it will be reversed, right for left. In some cases this is important, and in these some device has to be adopted to prevent the

reversal, but these do not belong to an article dealing only with a first attempt. May I hope that I have said enough to show how very simple are the operations which carbon printing requires, and how very few are its requirements in the way of apparatus. The material which I have named is that with which I should recommend any beginner to start, as it is easier to use than some of the warmer colors of tissue and rougher surfaces of transfer paper. The "actinometer" or "guide negative" differs from that which many photographers use, because it is customary with the great majority to make a guide print on P.O.P. I prefer to use a piece of transfer paper sensitized at the same time as the tissue, as not only is this very economical, but it allows for differences in the sensitizing bath. Different samples of bichromate and different strengths of solution affect the speed of printing. The method I use, and have described, allows for these. Later on, the photographer may wish to vary the strength of his sensitizing bath, as this can be done to adapt the tissue to negatives of different degrees of vigor, and when he does this he will find the method of timing printing given in this article particularly valuable. There are two points I do not propose to touch—they are the beauty of the carbon print and the interesting character of the operations that have to be carried out to make it. These may safely be left to demonstrate themselves.

### FOCUSING AND DEPTH OF FOCUS.

BY L. F. WASTELL and R. CHILD BAYLEY.

Next in importance to the question of exposure comes that of focusing. This in hand cameras is got over in one of four ways. (1.) The camera may be of the type known as fixed focus, in which the distance between the plate and lens is settled once for all by the maker. (2.) The distance of the principal object may be estimated with the eye, and the lens set to a scale accordingly. (3.) The camera may have two lenses of exactly the same focus, one working on a ground glass and the other on the plate. In this case the focusing is done by the eye itself on the ground-glass as it is in (4) reflector cameras, in which one lens serves both purposes.

#### DEPTH OF FOCUS.

Before we can understand the principle of the fixed focus camera, we must pay a little attention to the subject of depth of focus. If we focus some object a few yards away as sharply as we possibly can on the ground-glass of a camera, and then look carefully at the images of objects at other distances, even if our lens is of the very highest type, we shall note that as they get further and further from the object upon which we focused, so they get less and less sharp. But we shall also notice that for some little distance each way from the object the loss of sharpness is not perceptible. In this article it is supposed that the lens is one having an absolutely flat field. While such lenses exist only in theory, most high class modern forms comply with sufficient closeness for our remarks to apply to them. With lenses having more or less curved fields, it must be understood that in all references made to objects at different distances being sharp, it is assumed that the object is in the centre of the field of the lens.

Another caution should be added. The data given upon the subject of depth of focus are mathematical rather than psychological. We take a hun-

dredth of an inch as the permissible "circle of confusion," but the eye demands greater sharpness in the foreground than in the distance, and greater sharpness for subjects with small detail than in those with broader masses. Some subjects lead the observer to look more closely at them than others, and he then notices a lack of definition which otherwise would be passed over.

Let us put the case another way. We focus sharply on someone, say, eight yards from the camera. Then, if he walks straight towards the camera we shall find that he can come some little way before his image is noticeably blurred, and he can go some little way further off than his first position, and in the same way his image will remain fairly sharp. If we had a perfect lens and an extremely fine focusing screen and looked at his image with a powerful magnifier we should notice that it seemed to become blurrier with much less movement, and that its apparent sharpness at distances other than the one at which he was focused on is really only a question of degree.

#### HOW MUCH BLURRING IS PERMISSIBLE.

If we take an infinitely small point of light, such, let us say, as the image of a star, and focus it sharply, the image is a point. As it gets more and more out of focus the size of the point of light increases; and photographers have taken this as a measure of the amount of blurriness or diffusion which is permissible in a photograph that may still, when examined with the naked eye, appear sharp. It is generally accepted that if such a point of light when focused on the screen or plate is not more than one hundredth of an inch in diameter, the sharpness will be all that is needed in a photograph. If the photograph is to be enlarged and then judged for sharpness, or if it is to be used for scientific purposes, a much greater degree of sharpness may be essential, but for most purposes of hand camera and similar work we shall not be far wrong if we take one hundredth of an inch as the diameter of the "circle of confusion" as it is called.

We see then that when we have focused our camera upon any object, there are three factors which it is desirable to know. How far the object was from the camera when we focused, how near it may be brought without seeming to be out of focus, and, in the same way, how far it may be removed. The difference between the nearest and the farthest points is a measure of the "depth of focus" of the lens; and for all ordinary purposes we may assume that the amount of "depth of focus" depends absolutely upon the focus of the lens and its aperture. Claims that one type of lens has more "depth of focus" than another may be dismissed as a mere subterfuge of the optician since all lenses of the same focus and aperture have the same depth; only in some the definition is so poor that the image never looks sharp, and so does not seem to get fuzzy so quickly as it would do if we had a sharp picture with which to compare it. The only methods by which it is possible to increase "depth of focus" are to shorten the focal length or to stop the lens down.

#### INFINITY.

As we proceed to examine the sharpness of the image on the ground-glass, if we get the person focused on to go further and further away, we soon find that he reaches a distance beyond which no further alteration of focus is required. Everything at that distance and beyond is equally sharp. This position of the lens from the screen is marked on many hand cameras as "Inf." or "Infinity," because it is the focus of an infinitely distant object.

*The Hand Camera,*

## THE FIXED FOCUS CAMERA.

We are now in a position to consider the "fixed focus" camera. If it is intended that all distant objects taken with it shall be perfectly sharp, it may have its lens set at the infinity point, once for all. We shall then know that everything that is at least a certain distance from the camera will be perfectly sharp, and the shorter the focus of the lens, or the smaller the aperture of the stop, the nearer to the camera will that point come, until there are some very short focus lenses used on very tiny plates which give everything sharp that is more than three or four feet away. But the ordinary hand camera for quarter-plates needs a lens of four and a half inches focus, at least, if we are to avoid startling perspective effects, and a four and a half inch lens at  $f/11$  set to infinity, according to the tables, will give us everything sharp at sixteen feet distance and beyond. These are approximately the focal length of lens and stop used on most fixed focus quarter-plate cameras.

A little consideration will show that it is not advisable in a fixed focus camera to set the lens at infinity. The distance is, as a rule, not needed sharp so much as the foreground, and a little blur that would be fatal in the latter is in the former often more of an improvement than a drawback. Apart from this, which is a matter that must be left to the taste of the photographer himself, we still need not set the lens of our fixed focus camera at infinity. If we do we shall sacrifice some of its depth of focus. To make this clear, let us recur to the case of the figure on which we focused. We found that as he went further away from the camera, he could go some distance before his image got appreciably blurred. We cannot have anything further away than "infinity." We ought, therefore, to focus on some object nearer than the distance "beyond which all objects are in focus," so that objects at infinite distance are not absolutely sharp, but are just within the limit of blur which we allow. We can find this ocularily by focusing some object a few hundred yards away, which for hand camera lenses is quite far enough to be considered as "infinity," and then gradually increasing the distance between the ground-glass and the lens until the object is as blurred as it is permissible for it to be. That is, then, the best position for the lens in a fixed focus camera. It is sometimes called the "hyperfocal distance"; and if we settle on the degree of definition allowable, it becomes an easily calculable quantity for any lens and aperture, and as we have said is quite irrespective of the make or design of the lens.

The hyperfocal distances for certain lenses and apertures are given in the tables, but it is quite simple to calculate them for one's self. To find the hyperfocal distance we square the focus of the lens in inches, multiply the result by one hundred, and divide by the  $f$ / number of the stop used. The result is the distance in inches. Thus, a ten inch lens at  $f/8$  has a hyperfocal distance of 104ft. 2in., because  $10 \times 10 \times 100 \div 8 = 1250$  inches = 104ft. 2in. If we had a ten inch lens therefore at  $f/8$  and wished to get the greatest degree of depth of which it is capable, we should focus it as accurately as possible for an object 104ft. 2in. away. The distance would then just comply with the idea of sharpness that we have adopted.

Another point we may then note, and it is worth remembering, is that by dividing the hyperfocal distance by two we get the distance beyond which everything is in focus when the lens is focused at the hyperfocal distance. So

that in the above example we should know that we had everything sharp that was 52ft. 1in. at least from the camera.

The nearest and farthest points which with a high-class lens may be expected to be reasonably sharp when focusing has been performed for various distances can be calculated by multiplying the hyperfocal distance for the lens and stop, in inches, by the distance focused for in inches, and dividing the result so obtained by the hyperfocal distance plus the distance focused for, to obtain the nearest point, and minus the distance focused for, to obtain the farthest point.

Thus. Supposing that we have a 5in. lens working at  $f/8$ , and we require to know the depth of focus when an object eight feet away is sharply focused. The hyperfocal distance for a 5in. lens at  $f/8$  is 26 feet = 312 inches. Eight feet = 96 inches. The nearest point is, therefore,  $(312 \times 96) \div (312 + 96) = 29952 \div 408 = 73$  inches = 6 feet 1 inch. The farthest point is found in the same way  $(312 \times 96) \div (312 - 96) = 29952 \div 216 = 138$  inches = 11 feet 6 inches. With a first-class lens, these figures will be found to be approximately correct, for the degree of blurriness permissible.

It must be distinctly understood that these figures are for the ideal flat field lens, and that with lenses in other respects perfect, but having a curved field, the figures would only hold good for objects in the centre of the field. The blurriness is moreover a matter of degree, and the quantity allowed in the calculation may be greater than some people prefer.

#### CAMERA FOCUSING BY SCALE.

In the case of cameras of this type, the hyperfocal distance of the lens at its largest aperture is almost as important as it is in a fixed focus camera, and should be known. In an ideal world, it would be marked on the focusing scale; as it is we have more than a suspicion that in many cameras the infinity mark is really set at the hyperfocal distance. Most users of hand cameras of this type, if they do not know of its nature or position, know at least that there is a certain point at which the camera may be set, at which the distance is not critically sharp, but is sharp enough, and that by setting the cameras to this they get objects in focus nearer to it than if the camera were set at infinity.

The most important thing for users of cameras of this type to know is a thing that can only be learnt by experience, and a sufficient knowledge of it the distance of the objects which they wish to photograph, and the degree of depths of focus of their lens. The latter can be expressed in tables, but it is will come by practice. Distance judging is a thing that can be learnt, and learnt with surprising ease, by anyone who is determined to do it.

#### ESTIMATING DISTANCES.

The simplest way is to take a walk in the fields, and selecting some fence or tree or other object, settle in your mind upon a certain number of feet or yards, and then walk up to it and without hesitation stop at what you believe to be that distance from it, and measure and see how far out you are. This may be done over and over again for each distance marked on the scale of the camera. If a couple of friends do it together the competition is a great help to persistence and to accuracy, and an hour or two will be enough to give quite a surprising degree of efficiency. When this is done, the same sort of

exercise can be gone through, only walking away from the object, with the back to it, stopping at the supposed distance, and turning round and measuring. This is a most useful thing to be able to do; since many of the best street groups and similar subjects can only be got, without consciousness on the subject's part, by some such practice.

Each photographer will have his own way of estimating distance; some do it in feet or yards, others more or less consciously in "lengths." This is perhaps the commonest and the easiest way of estimating a distance that cannot be paced out at the time. All that is needed is to try and imagine lying on the ground a number of people of the average height, with the feet of one against the head of the next, in a line from one's self to the object. If the number of persons is doubled, the approximate distance is given in yards, and is accurate enough as a rule, for all practical purposes. Whatever be the actual mental standard adopted, a little practice will be found to give a speedy improvement in one's powers of judging distance—an accomplishment which, with the type of camera referred to, is an absolute necessity.

#### THE USE OF THE FINDER IN JUDGING DISTANCES.

There is another method of judging distances which is sometimes very useful, and that is by means of the finder. It will be found particularly serviceable for those who go in for groups, street scenes, or single figures. That is, to select the distance at which most work is done, get a friend who is neither notably tall nor short to stand, with his hat on, at that distance from the camera, and then getting his image in the centre of the finder, to draw a black line on its surface the exact length of his figure. It will be found possible by this means to look on the finder, paying no attention at all to the distance of the subject otherwise, and to make the exposure when the distance is approximately what is wanted, judging entirely by the size of the image as seen in the finder, and compared in length with the line marked thereon.

While on the subject of finders, it is well to emphasise the fact that it is not possible for a finder to be always and exactly correct, however much care and skill have been taken over its design and construction. For this reason it should never be taken as giving more than a rough approximation of what will be got upon the plate, and if anything is being photographed which it is important should all be got upon the plate, an ample margin for accidental error should be allowed. The object is far better to be too small (an enlargement can always be made) than to be either partly off the plate or just squeezed on—which looks as bad, if not worse.

#### TWIN LENS CAMERA.

We now come to the third type of camera, commonly called the twin lens. It is a favorite with some workers, though its type is probably the least popular of the four. Its bulk is generally against it, and as far as our present subject—focusing—is concerned, it suffers from certain drawbacks. It is difficult indeed to get two lenses so exactly paired that the image given by one on the ground-glass is the exact counterpart of that given by the other on the plate. Even if the lenses are obtained, they constitute an expensive luxury, since we have to have two lenses to do the work of one. And if we are to get the full benefit of the design, both lenses must be equally good. If we have a high-class lens for the actual photography, and an ordinary cheap lens for visual purposes, we have little more than a large finder. We can get no reliable indi-



cation from the appearance of the subject on the ground-glass, whether it will be as sharp as we desired it in the negative, because the corrections of the one lens are so inferior to those of the other. At the same time there are some excellent twin-lens cameras made, and they are certainly far easier to use than a scale-focusing camera, coming intermediate between that type and the reflectors. It is well to remember, when using cameras of this class on comparatively near subjects, that the finder-camera is above the other, and that therefore there is a want of register between the two images which gets worse and worse as the subject gets nearer and nearer to the camera.

#### FOCUSING WITH REFLECTOR CAMERAS.

There is little to be said on the subject of focusing with cameras of this type, because it approximates very closely to focusing with a stand camera. We have with these instruments two very decided advantages: we can focus accurately—if the camera is made accurately—right up to the moment of exposure, and we can see to a nicety what it is we are getting on our plate. It is well to acquire the habit of following a moving object with the focusing, so that it is in focus all the time, and the focusing does not have to be done hurriedly at the last moment. This requires skill to do effectively, but it is soon acquired, and the certainty that at any moment the picture can be secured is often invaluable.

#### ON LENSES FOR HAND CAMERAS.

Before leaving this subject we may as well point out the bearing of the lens itself upon the subject of focusing. As long a focus as can well be arranged is no doubt to be preferred for pictorial reasons, but bearing in mind what we have said above on the subject of depth of focus, it will be seen that with the same relative aperture, the longer the focus of the lens the less depth. This means not only that our focusing must be much more accurate with the long focus lens, but also that we are more limited as regards the general sharpness than we are with a shorter focus. For this reason such a lens as a 7in. lens on a quarter-plate, although on some grounds much to be preferred to a 5in. or 5½in., is harder to use, and in some cases may not be able to give us what we want. We are apt to forget that if we have a short focus lens we can get its advantages without having its drawbacks. If we take the subject from the same standpoint with the 5in. lens as with the 7in. we shall have exactly the same perspective rendering in the two cases, while if both are worked at the same relative aperture, we shall get a picture much sharper all over with the 5in. lens than with the 7in. Of course, it will be much smaller, but enlarging is so simple that this is almost immaterial. With the lenses usually fitted to hand cameras, it is most important not to get the subject too near the camera, so as to occupy nearly the entire plate, unless it is a landscape or of a similar type, or we shall get unpleasant wide-angle effects.

The objection to long-focus lenses in hand cameras applies also to larger sizes than quarter-plate. Half-plate hand cameras are made, but not only are they very bulky and cumbersome, but the depth of focus of the lenses with which they are fitted is so much less, that many subjects possible with quarter-plate cameras are impossible with the larger ones. The largest hand camera that we can recommend takes a 5 by 4 plate, but the quarter-plate is preferable to this. Fancy sizes, as far as plate cameras are concerned, are best left alone; with roll films the same drawbacks are not experienced.—*Photography*.

## Editorial Notes.

One of our contemporaries indulges in some rather heated remarks on the general tendency of trade developers to treat carelessly the precious films entrusted to them by photographers, using as a text the experience of a friend of the editor's who made a large number of exposures on a European trip. According to this account these negatives were irreplaceable and were completely spoiled by the carelessness of the developing photographer. Such cases have undoubtedly happened, but we protest against the whole American trade being thus denounced on the strength of such a reported incident.

In the first place, while undoubtedly many very good photographers sometimes have exposed plates developed for them, we venture to say that no one ever becomes a competent photographer and judge of exposure unless he develops himself. The man, no matter how competent he may be, who makes a trip of Europe and exposes hundreds of films in all kinds of weather and under the most various conditions, and brings them all home to be developed, has no one but himself to blame if all turn out useless on development. He has no right to attribute a single failure to the man who develops. Even when each day's exposures are developed at once, and the utmost care is taken to get correct exposure by good actinometers, there is bound to be a fairly large proportion of failures when travelling. There is always a chance of the shutter failing, of the bellows springing a leak, of old plates or films being purchased, of a dozen other things happening which will spoil a whole series of exposures. Some such simple accident may ruin hundreds of exposures for the man who but presses the button. To attribute the blame to the developer is childish. As for suing and recovering heavy damages, as our contemporary alleges was done in one case, we fear this must be a story born of a lively imagination. The only equitable grounds on which such a decision could be rendered would be culpably negligent handling which resulted in the mechanical destruction of the negatives by tearing, scratching, staining or breaking. For such damage any reputable operator would promptly make the best possible amends for the sake of his own reputation. Dividing the responsibility for a fogged, a too dense, or a too thin negative between exposurer or developer would be a ticklish question for the most skilled expert.

At the best, the development of other people's exposures in large quantities is a pure mechanical task, and should be regarded as such by all concerned. The patient and loving and tender care which struggles to save and improve in development a wrongly exposed plate cannot be had in commerce. The development of films by electric motor and of plates in batches in a tank of dilute developer are more and more coming to be commercial practice. Such treatment will save all that can be saved in the negative, and what is not brought out by such treatment is not and never was there, despite the wails of the traveller who is sure that he got an excellent view of the dungeon at Chillon by a hand exposure with the shutter set at I and the largest diaphragm.

\* \* \*

### OUR MONTHLY PRIZE COMPETITIONS.

THE FLOWER COMPETITION.—The entries for the Flower Competition were few in number, and not of the merit which we expected. The first prize is awarded to John F. Johnston, who submitted two prints entitled "Larkspur" and

"Spanish Iris," which have most beautifully reproduced the texture of the white flowers, and show good arrangement. The second prize is awarded to James Thomson, for *Narcissi*, a good decoration composition. The yellow centers of the flowers are too dark, showing failure to use an isochromatic plate with proper color screen.

The subject proposed for June is "Instantaneous Pictures." This is necessarily a technical subject, but artistic quality is not excluded. Prints for this competition should be received before July 1.

Prints for future competitions are solicited from any reader, whether or not a subscriber to the AMERICAN AMATEUR PHOTOGRAPHER. They should be sent by mail or express, fully prepaid, to AMERICAN PHOTOGRAPHY, 361 Broadway, N. Y., to arrive on or before the date set for closing the contest.

First and second prizes will be awarded a bronze medal in each case, with blue ribbon and silver bar, and red ribbon and bronze bar, respectively. The first award includes also a cash prize of five dollars. Honorable mention may be given to meritorious pictures which do not attain prize rank. Awards may be withheld or divided at the discretion of the judges. Pictures awarded prizes or honorable mention may be reproduced, and unsuccessful pictures will be returned if requested.

Future subjects are: For July, Pinhole Pictures. Closes August 1. For August, Animals. For September, Marines, including Views of the Sea or Great Lakes, Shipping, Yachts and Harbor Scenes. For October, Mountains. Also Calendar Competition. For November, Atmospheric Effects, including Fog, Mist, Rainy or Snowy Days, Rainbows, Sundogs, Clouds, etc. For December, Genre. For January, Portraits. For February, Snow Scenes.

\* \* \*

#### PUBLISHERS' ANNOUNCEMENT.

The publishers having acquired from F. Dundas Todd, of Chicago, Illinois, the "PHOTO-BEACON" and the book publishing business connected therewith, beg to announce the merging of that publication with the AMERICAN AMATEUR PHOTOGRAPHER and CAMERA AND DARK ROOM under a new title to be known as AMERICAN PHOTOGRAPHY, which is to be published monthly at the same subscription price, \$1.50 per year.

The first issue and volume under this new title is to appear July, 1907. Unexpired subscriptions to the Photo-Beacon will be continued without additional advance.

Mr. Todd will become an associate editor of the combined magazine and will aid in promoting its interests and the interests of all photographers. His well known popular publications such as "First Steps in Photography" and the "Photo Beacon Exposure Card," will be continued, which in connection with "American Amateur Photographer" Hand-book series will prove to be of much value to all interested in photography. The publishers have the expectation that the enlargement of the scope of the combined magazine to cover all fields of photography will interest many new subscribers and at the same time greatly enhance its circulation, in addition to supplying a medium of much value to those wishing to popularize photographic goods of all kinds.

After a continued publication for the past eighteen years of the American Amateur Photographer (for Vol. 1, No. 1, was published in July, 1889), it has been deemed advisable to simplify the title as above noted in order that the



**LARKSPURS**

**JOHN F. JOHNSTON**

**First Prize Flower Competition**

field may be broadened to satisfy every one interested in the promotion of photography.

It will be the endeavor of the publishers, with the aid of the increased editorial staff, to produce a magazine of reliable information on all matters pertaining to photography. The continued support of all subscribers is solicited.

AMERICAN PHOTOGRAPHIC PUBLISHING CO.,

PUBLISHERS,

361 Broadway, N. Y.

---

## Our Portfolio.

---

Prints for criticism in "Our Portfolio," only one at a time and only one each month should be sent to any of the editors whose addresses are given on the title page.

2297. R. A. RACE.—"The Trout's Paradise;" exposure,  $1/5$  sec.; stop, 32; 3 p. m. The appearance of this suggests that  $1/2$  second would have been nearer the mark. If you are a regular reader of these pages you must know that such extreme contrasts of black and white are caused by under-exposure and over-development of the negative. To bear out your title and add a point of interest to an otherwise uninteresting view, an obliging friend, in the act of angling, posed so as to occupy a position one inch from the left and a little over an inch from the base of the picture, would have been an improvement. There are pictorial possibilities in the view you have selected and you should essay another trial.—C.

2298. FORMAN HANNA.—The platinum print from negative No. 118 is a technically perfect print from a perfect negative—really good to look at; but it is of a subject that is hardly worth the trouble not to mention the time and expense. A couple of tree stumps, a tangle of brushwood and the dismantled remains of a logging wagon is a subject that fails to hold the interest, however well photographed.—C.

2299. SCOTT LEVY.—The platinum print is good. This being a first attempt and entirely satisfactory, we repeat what we have often said before, that we would like to see more workers print their pet negatives in this medium. As you will note the tone values are very delicately and correctly rendered in the landscape—far more so than you could have secured with gaslight paper. The only thing that is lacking to give the picture perfect balance is some tonality in the sky, and this is due to a shortcoming in the negative which could have been remedied by control or shading in the printing.—C.

2300. L. E. BRUNDAGE.—By underexposing a landscape you have secured a beautiful cloud effect. Had it not been for the tree which projects against the sky, this would have been a valuable cloud negative which you could have printed into other pictures with advantage.—C.

2301. H. E. STOUT. The print of "Luna Park" on Artura green is indeed a very close resemblance to a carbon print. This paper is well suited to certain subjects, and the low toned print of the view in the park would have looked better in the green also. We like the softness in the distance in the latter



JAMES THOMSON  
Second Prize Flower Competition



2304

A Canadian Landscape

print, but do not like "a foreground that is all water." Lowering the camera or changing the position so as to get a portion of the near bank to show gives a feeling of stability.—C.

2302. W. W. BRACKENRIDGE.—"Outdoor Portrait." While this is fairly good from a photographic standpoint, it contains so many other defects that it falls far below the standard of some of your earlier work. The various degrees of sharpness in the background savors too much of "nature faking." The repeating lines of the out-of-focus clapboards in the upper right hand corner should have been avoided. The figure is poorly posed or too much posed—very stiff indeed and seemingly at a loss to account for finding herself in that position. Had the figure curved gracefully forward in the act of smelling or examining the blossom, with a pleased or interested expression on her face the picture would have been greatly improved.

2303. FRANK R. ROYCE sends a batch of twelve prints, all above the average submitted for criticism. No. 1, "At the Well," a print on Eastman's sepia paper, a maid seated on an old-fashioned well and listening with a doubting expression to the talk of a male companion, is good in pose, in composition and in expression. We would have reproduced it, but the color and texture of prints on this paper always lose so much in the hands of the engraver that the reproduction can give no idea of the original. No. 2, "Last of the Season's Snow," comes very near being up to the mark, but the patch of white paper on the left does not truthfully represent snow, especially the kind of snow we see at the close of the season. A little longer exposure and less development would have made this a good thing. [The others in our next.]—C.

2304. L—— (Canada).—"Landscape" with sheep is a very good example of grouping and if the negative was only a little less harsh in contrasts, it is a subject that would make a splendid enlargement. As it is, this should be tried, and if royal bromide is used and a full exposure given, we think the result will be a picture well worth the trouble.



2302

W. W. BRACKENRIDGE





2300

L. E. BRUNDAGE

2305. R. H. BEIL.—In the nameless print you have been careful to guard against the empty foreground as suggested to Mr. Stout, but have not been careful to give sufficient exposure to render the subject in anything like true color values. 1-25th second at f-32 is entirely too short exposure for landscape work. If you had to give this time, why did you not use f-11 or f-16 at the least? The horizon line is too near the centre and the lack of variety of form in the stretch of landscape shown renders the picture uninteresting.



2306

MRS. ALICE F. FOSTER

2306. MRS. ALICE F. FOSTER.—“Burns Avenue” and “Entrance to Eden Park” both show underexposure, both are fairly well composed and both objects of little other than local interest—mere records of fact—but none the less valuable to the maker of the picture. The three little “Brownie” pictures are really better from every point of view than the larger pictures and are well composed bits, well photographed and neatly mounted.

---

## Society News.

TORONTO CAMERA CLUB.—The Secretary and Treasurer, Mr. Hugh Neilson, writes under date of May 24th that during the past winter season the club has had an accession of forty-four new members, which is considered as an indication that the club is doing very well. The club has recently held a print exhibition of much merit.

CAMERA CLUB OF NEW YORK.—During the month of May there was a print exhibition of members' work hung on the club room walls, some of which was quite meritorious.

Prior to this exhibition were exhibits of twenty-one members of the Society of Professional Photographers of New York and exhibition of the work of Mr. M. W. Seamon, a member of the Camera Club.

On the evening of May 3d, Mr. Frank Dugmore, a club member, gave an interesting talk illustrated by slides of his own, on the difficulties met with in photographing natural history objects such as birds, fishes, deer, moose, porcupines, etc. He spoke of the tameness of the birds, if one only exercised great patience, to photograph them at the right time and exhibited pictures of birds' nests hidden among thickets, illustrating how the color of the birds' plumage matched the tree branches where the nests were. In some cases it was difficult to note where the bird was located.

On the evening of May 10th the Interchange set of the Bisbee (Arizona) Camera Club's slides were exhibited. The subjects were all Western in character and illustrative of mining in the large copper mines situated in that locality.

THE AKRON (OHIO) CAMERA CLUB: Concerning this club Mr. E. J. Hoskins states that the club held its regular meeting in the Y. M. C. A. Building on Tuesday evening, May 14th. The new constitution for the government of the club was reported by the committee appointed for the purpose and was unanimously adopted.

The club expects to give an illustrated lecture by Edward G. Mason, the former president, early in June on “The History of Akron for 100 Years.” This is the centennial year of the first white settlement within the present limits of the city and this fact furnishes the theme for what they hope to make a highly interesting and instructive lecture. Slides are already being prepared and will be both historical and pictorial in character.

## Our Table.

Books for review, apparatus and materials for examination and report, should be sent to any of the editors whose addresses are given on the title page.

### A NEW SHUTTER.

THE COMPOUND OPTICAL WORKS, Tribune Building, New York City, is a new company which has been organized to act as agents in the United States for the Compound Sektor Shutter. This is a between the lens shutter that has won universal approval in Europe on account of its extreme compactness, lightness,



efficiency and durability. The working parts are of tool steel, the exposed parts of aluminum and it is so simple in construction that there is very little chance of its getting out of order. It is claimed that it will register exposures of 1-250th of a second, which is fast enough for most purposes. They also advertise an anastigmat lens, working at f 6.7 and lens and shutter are described in their circular, which is free to all interested.

\* \* \*

### A NEW GRAFLEX CAMERA.

Folmer & Schwing Co., of Rochester, announce a new Graflex which is called the Press Graflex, and which, as the name implies, is designed for the Press Photographer.

The Press Graflex is made in the 5x7 size only, and is of the non-reversible type. It is fitted with two tripod screw plates and may be used on a tripod in either horizontal or vertical position. The telescope side arms are made long enough to give 15" focal capacity, and the new Press Focal Plane Shutter which carries the curtain roller back of the focal plane allows this camera to accommodate lenses of from 7 to 14" equivalent focus, permitting of a wide range of lenses for fine situations, or the use of long focus lenses for track or field work. The minimum focus of lens which the Press Graflex will take is 7".

The tension roller is operated by a clock spring, which may be speeded up to 1/1500th part of a second, or lowered to 1/5th of a second. Slow instan-

taneous exposures can be made by setting the curtain aperture index at "0," handling the camera the same as for regular instantaneous work, as the mirror opens the exposure as it swings upward out of the cone of light, automatically tripping the curtain, which terminates the exposure. Time exposure of any duration can also be made.



The focusing hood is large and spacious, giving a full view of the field, with a complete eye shield fitting the contour of the face, permitting the operator to view the image on the focusing screen, right side up, with the greatest of ease. The camera is opened ready for focusing by pressing a small lever placed near the end of the handle, conveniently near the right thumb, when carrying the camera. The cover operating the focusing hood is likewise opened automatically, and the construction of this cover is such that the camera may be carried ready for use while it is opened.

The price of the camera without lens is \$100.00. A complete descriptive price list will be mailed on request.

\* \* \*

**TWO NOTEWORTHY LENSES.**—By virtue of its superior quality the Bausch & Lomb-Zeiss Portrait Unar has attained a commanding position in the photographic world and its popularity increases as it becomes more widely known. Its fine optical corrections together with its adjustable systems for securing diffusion make it a wonderful all-around lens suitable for busts, three quarter and full figures and also for groups. Nothing better could be wished for by the photographer who wants a single lens for all his work.

Another lens of remarkable range is the Bausch & Lomb-Zeiss Convertible Protar, Series VIIa, which might well be used by photographers who do outdoor work and home portraiture. The single lenses of this convertible series are adapted for instantaneous outdoor work under favorable light conditions, for land-

scapes, groups and large heads, while the doublet is adapted for groups and architectural work.

As an example of what this lens will do in the hands of a photographer we cite the fact that it was used by W. S. Lively in making the two portraits entitled "Son of the Mountains" and "Study of an Old Man." The former won the Grand Prize in Open to World Class, April 10, 1907, of the Tri-State Association of Photographers and the Grand Prize in Open to World Class, Chicago, May 9, 1907. The latter was selected to hang in the Daguerre Memorial Building, at Winona Lake, Indiana.

\* \* \*

SELF-PROPELLED VEHICLES—A Practical Illustrated Treatise on Automobiles. Cloth gilt, \$2.00. Theo. Audel & Co., New York.

The fifth edition, revised and enlarged, of this standard work should be in the hands of everyone who is interested in motor vehicles. Unlike most other text books on this subject it treats in an unbiased manner and devoid of technicalities on all modern methods of propulsion, transmission of power, the construction of gasoline engines, steam engines and electricity as applied to vehicles. It treats impartially of all the principal points for and against the various makes of vehicles and we felt after reading one of its chapters that we had derived more real information from a few pages than from as many other books on the subject. It is a relief to take up one book that has no axe to grind or advertising tone in its make-up and those who invest in a copy of "Self-Propelled Vehicles" will be well repaid.

---

## Letters to the Editors.

### CAMERAS AT JAMESTOWN EXPOSITION.

Norfolk, Va., June 1, 1907.

DEAR SIRs:

Responsive to your favor of the 29th ult., we beg to advise that cameras the size of 4 by 5 will be allowed on the Exposition Grounds and a charge of fifty cents per day will be charged for said privilege.

Trusting this information will answer your purpose, I am,

Yours very truly,

F. B. DAVISON,  
Chief Depts. C. & A.

---

### AN ENCOURAGING LETTER.

Washington, D. C., May 28, 1907.

Mr. J. P. CHALMERS,

Dear Sir:—I want to thank you for the encouraging notice I have just read in the latest number of my magazine. It means more to me than you know. I am equally grateful for the criticism, especially of the tree and water picture, for it opened my eyes to a danger that was all the more a danger because I was unaware of it—I mean a tendency to make my pictures *too* symbolic. The truth is, the title came first, the camera only crystallized it. I had stood on the bridge for a long time watching the scene. The soft, insinuating mists drifted down,

trying to blur everything into their own shifting instability. But the black tree resisted, and stood out strong and erect, towering distinct and clear above the creeping blur that tried to engulf it, reminding me of one firm hope to which a bewildered soul might cling. The same idea was repeated in the water: the mists tried to dull it down to their own deadening level, but neither would the water wholly yield. It strove its best to shine through, strong in the knowledge that the sun was there though veiled for a time. And the hills repeated the story: the nearest one was dull and gray, but in the distance a higher one stood out, catching the light that was far overhead, though the onlooker might not see it from his plane. I can hear you saying "This may be very pretty, but it isn't photography," and you are perfectly right. Since you think the picture is otherwise good I'll give it the more exoteric title:

"The soft mist veiled the distant hill,  
And dulled the water's sheen,"

and keep the esoteric one for myself, for there's nothing gained by speaking in riddles. Cheered by your kind encouragement I will shoulder my camera and start afresh, and sooner or later send you another picture to show you that I have profited by your criticisms.

Very sincerely,

OLIVIA T. CLOSSON.

---

## Answers to Correspondents.

---

Questions for answer should be sent to any of the editors whose addresses are given elsewhere. When a personal reply is desired a stamped, self-addressed envelope must be enclosed.

---

### PROLONG THE DEVELOPMENT FOR DENSITY.

A. L. STREIFFER complains that he does not get density enough in his negatives when developing with rodinal; but as he prefers to use it on account of its convenience, would like to know how it is that others get all the density they want.

This is a hard nut to crack unless we had more particulars, but it is most likely due to removing the plate or film *too soon* from the developer. If he will refer to any table which gives the time factors for the various reducing agents in "stand" development he will see that rodinal is quoted at 40, against 14 of the more commonly used metol-hydrochinon, while hydrochinon alone only calls for 5. Density with any developer is only a matter of time.

### SAFE LIGHT NECESSARY FOR ORTHO PLATES.

GEO. A. ROBINSON says that he used on a certain job one dozen Seed's 26x plates and a number of Seed's L Ortho giving the same exposures as his speed card listed both at approximately the same speed. In the developer they behaved exactly alike at the start, but towards the end the latter seemed to veil over and on being fixed and dried the negatives on 26x were clear and perfect, while the others were hardly printable. "Are the L Ortho equal in speed to the 27 Gilt Edge? If so, why are they not so listed?"

The L Ortho are not equal to the No. 27, but are approximately the same as 26x in speed. Your trouble no doubt can be traced to the illumination of

your dark room. People who are not in the habit of using orthochromatic plates forget that the only qualities these plates possess over others is that they are more sensitive to the red and yellow rays; therefore it stands to reason that what would be a safe developing light for ordinary plates will in a short time fog an ortho plate. Try covering the tray during development and examining the negative farther from the light and for as brief a moment as possible and you will find the ortho plates will develop as clean as the others and yield *better negatives*.

#### RELIABLE EXPOSURE GUIDES.

MRS. W. T. PRENTISS asks us if there is any exposure meter or guide which we can recommend as being correct under all conditions and easily understood.

The only meters which fulfil these requirements that we know of are the Wynne Infallible and the Watkins Bee Meter. Both of these are neat and shaped like a watch. As they tell the actinic value of the light at the moment of the exposure there is no guesswork and therefore they are equally correct under all conditions. We have put the Wynne meter to many a test and it has never failed, in fact might say that it is infallible, although in our case it has worked itself out of a job except on rare occasions. The careful and intelligent use of such a meter for a time is a thorough training in judging exposures. The operation is simple. You hold the meter in the shade of the body until the test paper darkens to the shade of the sample tint. The number of seconds or minutes required taken into consideration with the diaphragm aperture and speed of the plate gives the exposure.

#### PRINTING PHOTOGRAPHS ON FRUIT.

MISS EMILY SCHWARTZ. "I remember reading in one of the daily papers some time ago about photographs being printed directly on to fruit such as apples, etc. Will you please let me know what sensitizer is used for this purpose?"

Garbled and misleading accounts of this fad appeared in many of the daily papers during the Fall of last year. To print the pictures no sensitizer is used, only the delicate art of "nature-faking." The necessities are an apple tree bearing a fruit which rapidly reddens as it becomes ripe, and a little film negative of your loved one. Simply attach the film to the sunny side of the apple with white of egg and let Nature do its work. The whole apple may be encased in a black paper bag and a vignette cut over the film part, which greatly adds to the effect. Young ladies going to the seaside to acquire their Summer coat of tan have made use of the same "sensitizer" to imprint on their arm a photograph of—their father or brother.

#### PHOTOGRAPHS FOR PUBLICATION.

ROY CARLTON and others want to know where they can find a market for their pictures, and the prices paid.

Unless one can get a regular contract or engagement with a paper to do certain work, the prices generally paid to transients is so small as to be hardly worth the trouble. In the October 1906 number of CAMERA AND DARK ROOM (price 10 cents) we published letters from a number of publishers who offer pay for pictures. Press photography is not an easy job to get into or to hold and requires training and a journalistic instinct. An article in our next number will give some hints on this subject.

JUNE

1907

RECEIVED  
JUN 20 1907  
JUN 20 1907  
JUN 20 1907

15 CENTS

# AMERICAN AMATEUR PHOTOGRAPHER

AND

## CAMERA & DARK-ROOM



**Portland Camera Club  
Exhibition Pictures**

Published Monthly by the

**American Photographic Publishing Co.**

NEW YORK AND BOSTON



# **For Cloud Effects Without Ray Filter**

## **Use Ansco Film**

**The leading film and plate tester in the  
country writes:**

**"It gives me pleasure to report that  
Ansco Film tested recently shows both  
greater speed and better orthochromatic  
qualities than any hitherto tested of other  
manufacturers. While I cannot allow you  
to quote me publicly, I want you to have  
confidence in advertising the magnificent  
improvement you have made."**

**SEND FOR ANSCO CATALOG**

**The Anthony & Scovill Co.  
Binghamton, N. Y.**

# CYKO PRINT

IS A WELL BALANCED PHOTO PRINT

PERFECT HARMONY BETWEEN  
HIGH LIGHTS AND SHADOWS,  
LINKED BY THE SOFT GRAD-  
ATIONS OF THE MIDDLE TINTS

## PROFESSIONAL CYKO

MAKES CYKO PRINTS FROM  
CONTRASTY NEGATIVES

SEND FOR INFORMATION

---

THE ANTHONY & SCOVILL CO.  
BINGHAMTON, N. Y.

Pictures  
Mounted  
With  
**HIGGINS'  
PHOTO  
MOUNTER**



Have an excellence peculiarly their own. The best results are only produced by the best method and means—the best results in Photograph, Poster and other mounting can only be attained by using the best mounting paste—

**HIGGINS' PHOTO MOUNTER**  
(Excellent novel brush with each jar)

At Dealers in Photo Supplies,  
Artists Materials and Stationery.

A 3-oz. jar prepaid by mail for 80 cts. or circulars free from  
**CHAS. M. HIGGINS & CO., Mfrs.**

New York Chicago London

Main Office: 271 Ninth Street (Brooklyn, N. Y.  
Factory: 240-244 Eighth Street } U. S. A.



**SALE and EXCHANGE**

Advertisements in this column 2 cents per word or 15 cents per line cash with order. \$2.50 per inch display.

**WANTED**—Original negatives of industrial, architectural, marine and other subjects. Send proof and quote prices Waldon Fawcett, Washington, D.C.

**FOR SALE**—1 5x7 Anthony & Scovill Penny Picture Outfit takes 1, 2, 3, 4, 6, 8, 12 and 24 Pictures on one 5x7 Plate. Good Portrait Lens, Shutter, Camera Stand, all complete cost \$45.00. Nearly new, make me an offer. E. L. ROOT, MERIDEN, CONN.

**Have You Read Our Eight Popular Handbooks?**

PRICE TEN CENTS EACH

**No. 1. RETOUCHING FOR AMATEURS**

Contains many valuable points about the use of the pencil and improvement of negatives, all in plain language.

**No. 2. EXPOSURE TABLES AND NOTEBOOK**

A practical aid to making correct exposures, with other useful information, and a notebook for recording exposures.

**No. 3. HOW TO TAKE PORTRAITS**

Tells about the lighting, posing, expression, exposure, development, etc. Thoroughly good and practical.

**No. 4. BROMIDE ENLARGEMENT**

Tells all about it, including instructions for making an enlarging lantern.

**No. 5. MANUAL OF PHOTOGRAPHY**

An instruction book for the beginner.

**No. 6. PRACTICAL DEVELOPMENT**

Contains many valuable points for the amateurs, including chapters on "Four Tray" and "Tank" Development.

**No. 7. POPULAR PRINTING PROCESSES**

Tells in simple language how to work blue print, printing out and developing papers

**No. 8. ELEMENTARY PICTORIAL COMPOSITION**

A little book which should be studied by every one who desires to make better pictures

These Booklets Cover the Various Subjects in a Complete and Concise Manner  
They are Intended Chiefly for the Beginner

ORDER BY NUMBER

Price 10c. Each, at your Dealers, or by Mail, Postpaid

**American Photographic Publishing Co, 361 Broadway, New York**

# SEE YOUR PICTURE

Right Side up. Full size of plate  
while you take it with

## THE HALES CAMERA



All the advantages of the reflecting mirror Camera combined  
with the portability and compactness of the usual folding type.

**Great Saving in weight, bulk and cost.**

Local plane shutter with speeds from  $\frac{1}{10}$  to  $\frac{1}{1500}$  of a second.

**All sizes from 4 x 5 to 8 x 10.**

Finely finished and up-to-date.

**Send for Booklet M.**

---

---

## HALES CAMERA COMPANY

**Ridgewood, New Jersey**

The publishers of this magazine beg to announce that they have purchased the PHOTO BEACON, which will be combined with the AMERICAN AMATEUR PHOTOGRAPHER AND CAMERA AND DARK ROOM, beginning with the July number, the title of which will be changed to

# AMERICAN PHOTOGRAPHY

F. Dundas Todd, well known as the editor of the Photo Beacon, will join the editorial staff of the new publication, which will be conducted on broad lines, with departments for all grades and kinds of photographers.

One contemporary has already referred to the combination as the beginning of a photographic magazine trust. We have no desire to corner the magazine market. Our object is to curtail the cost of production and give our readers more and better value for their money than is possible otherwise also to guarantee a circulation that will appeal to every manufacturer of photographic goods.

Tell all your friends about the new combination and get them to subscribe for

## AMERICAN PHOTOGRAPHY



**T**HE man who loves Nature, who feels her joys and sees her loveliness, who goes with his camera into the great out-of-doors to "express himself" in his pictures, wants to feel the assurance that he has a lens which will permit him the widest scope, that he can translate what his eye sees through his lens.

¶ Whether that translation shall be full, and brilliant, and powerful, or merely an "approximate" of his idea is largely determined by the lens he uses. The

## **Bausch & Lomb-Zeiss Tessar Lens**

has speed, brilliance and definition, a range that the amateur needs for outdoor work.

¶ Our catalog describes our complete series of lenses, and we shall be glad to send it upon request.

**Bausch & Lomb Optical Company, Rochester, N. Y.**  
 New York   Boston   Washington   Chicago   San Francisco

# Eastman Kodak Company

ROCHESTER, N. Y., The Kodak City.

## MORE THAN CONVENIENCE.

The convenience of Eastman Non-Curling, daylight loading film needs no demonstration. Also its unsurpassed quality has been fully determined. Yet there still remain two features of Eastman N. C. that have done much to insure the remarkable results so easily obtained by the Kodak system of picture making. The ability to resist or avoid halation is one.

Halation is simply fog caused by the light rays reflected from the back of the emulsion support. These rays, owing to the angle of reflection, attack the sensitive emulsion at points where they are not wanted and produce a blurring of the image which forms a radiation or halo of light around it—from whence comes the term “halation”.

Under many conditions, the ordinary glass dry plate will show this “halation” when N. C. film will be practically free from it.

This is the reason :

The average glass plate is nineteen or twenty times the thickness of N. C. film, so, naturally, the light rays reflected from the back of a glass plate will increase the amount of halation proportionately over that reflected from the back of the film.

In addition, the film is backed by the dull surface black paper, which absorbs a very great amount of the light that reaches the back of the film and thus reduces the halation to the minimum degree.

Practically the only halation evidenced with N. C. film is in cases where the over exposure in certain parts of the negative is so great that the light is *refracted* by the molecules in the emulsion, to such an extent as to cause a diffusion of light sufficiently strong to affect the sensitive salts.

For these reasons, it is not necessary to manufacture a double coated or

specially backed film to avoid halation.

In addition to its ability to avoid halation is its orthochromatic quality—that is, its ability in a great degree to correctly afford color luminosity value and thus affording the proper tonal gradation in negatives of subjects having a variety of colors, this feature showing to excellent advantage in its ability to retain the clouds in the negative where the extremes of exposure are not excessive.

Eastman N. C. film affords you not only every advantage of the most expensive and best glass dry plates, but also the advantage of lightness, compactness and the ability to perform every operation in full daylight.

## “A DARKLESS DARK ROOM.”

That is what a recent convert to tank development styled the Kodak Tank Developer.

The Kodak Tank Developer is more than that—it is also an errorless dark room. It not only permits you to remain in and work in the freedom of full daylight, but absolutely prevents the occurrence of any of the mishaps liable to hand development in the ordinary dark room.

Why should a machine produce better results than those produced by human agency?

The answer is simple and conclusive.

The Kodak Tank Developer was devised for the sole purpose of eliminating the chances of error by the old method, and the principles of its construction are sound from both the scientific and mechanical standpoints. By this method it is not possible to fog the film during development because no light can penetrate to the film. The film cannot be scratched or marred because it is protected by the apron with which it is enclosed. Unskilled judgment as to duration of

# Eastman Kodak Company

ROCHESTER, N. Y., *The Kodak City.*

development cannot lessen the chance of good results, because the time of development has been pre-determined by experts.

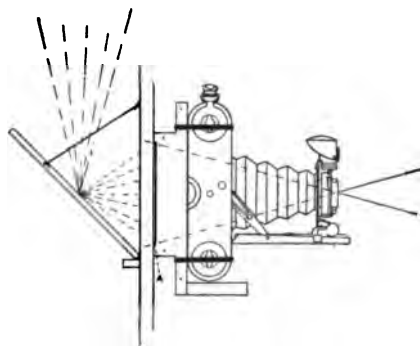
On every hand and at every step you are protected. If you are inexperienced, the Kodak Tank Developer supplies the experience. If expert, you appreciate the value of the tank and its automatic avoidance of error. The Kodak Tank Developer is a mechanical dark room expert, never in the way and always at your service.

## OF ANY SIZE.

C. H. Claudy, the well known writer and newspaper photographer, and incidentally a pocket Kodak enthusiast, has this to say in a recent number of *"The Camera."*

"One last word to those who have started photography with a large fund of enthusiasm and a small camera.

Shortly you will want to make larger pictures. You will want a large camera. Don't get it—get a lantern instead.

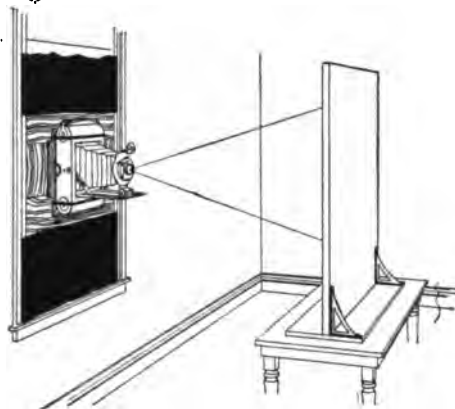


*Shelf for holding Kodak against window.*

If your present small instrument is too small for your capacities, in point of lens, shutter and adjustments, by all means get another, but still keep to the small instrument."

As a matter of fact, you can go

Mr. Claudy one better. Instead of getting an enlarging lantern, you may, if you possess a No. 3, 3A, 4 or 4A F. P. K. or Cartridge Kodak, make enlargements of any size with the same little Kodak that snapped the original negative.



*Method of using Kodak for enlarging.*

The process is exceedingly simple, and all that is required in addition to the Kodak and a simple shelf for holding the Kodak and negative in position, is a room from which the light may be excluded, and with a window through which the light may enter without obstruction from trees or nearby buildings.

The diagrams shown herewith illustrate the method of employing the Kodak for enlarging and are taken from our booklet "Bromide Enlarging with a Kodak," which may be had gratis from any Kodak dealer or by mail from us.

Mr. Claudy is right—there is no necessity of burdening yourself with heavy and bulky apparatus and making your outings work instead of play. Instead, just slip a Kodak in your pocket, out of the way until wanted, and upon your return and at your leisure, make your pictures any size you want them with this same little Pocket Kodak.

It's *all* easy the Kodak way.



# Eastman Kodak Company

ROCHESTER, N. Y., *The Kodak City.*



For Pictures

**4 x 5**

The

**No. 4**

## Folding Pocket Kodak

Fitted with the Kodak Automatic Shutter, is the highest type of pocket camera efficiency.

Price,  
**\$25.00**



The Kodak automatic shutter is always set, makes automatic exposures from 1-100 of a second to one second. "Bulb" and "time" exposures may also be made. Iris diaphragm stops from Nos. 4 to 128.

*Platinum Quality—Blue Print Simplicity.*

EASTMAN'S  
**W D**  
Platinum Paper

Develops in hot water alone.

A true platinum paper especially  
adapted for landscape negatives.  
Two grades—smooth and rough.

---

EASTMAN KODAK CO.

*All Dealers.*

Rochester, N. Y.



# ROYAL VELOX

A new paper with all the Velox simplicity but coated on a mellow toned stock that adds breadth and softness to the picture.

When sepia toned, with Velox Re-Developer, Royal Velox has the delicacy and charm of an old etching.

*At all Kodak Dealers.*

**Nepera Division,**  
**EASTMAN KODAK CO.**  
Rochester, N. Y.

90° without Frilling

# SEED Tropical

A perfect plate for  
hot climates. The same  
speed, latitude and uni-  
formity as the Seed 26 X.

ST. LOUIS, MO.



M. A. SEED DRY PLATE CO.

ST. LOUIS, MO.

# USE Hammer Plates

They develop and fix quickly with clean firm film.  
No spots, pinholes or frilling



Negatives on Hammer Plates are crisp, brilliant and full of detail that holds up through toning and fixing. Prints from such negatives never disappoint.

If your dealer can't supply you with recent emulsions write us—we'll put you in touch with one who can

---

**HAMMER DRY PLATE COMPANY**  
**Saint Louis :: :: Missouri**

## ONLY A BLISTER

but what it means to a photographer, who, after all his pains and labor, finds that in the process of fixing his work *is ruined* by the softening of the film, is a story *best* untold.

With the weather *warm* and the temperature of the developer and water *high*, conditions are most favorable for a *fine crop of blisters*. If you want an *antidote*, go right now and buy a box of

## "ACFA" Fixing Salts

(Patented)

*An actual trial will prove more than we can tell you in a whole bundle of literature*

## TWO IMPORTANT POINTS

Works rapidly, and the duration of fixing does not materially *increase* as the bath becomes *exhausted*.

---

We also manufacture "ACFA" Metol, Ortol, Glycin, Amidol, Rodinal, Elkonogen, Intensifier, Reducer, Biltzlicht and Pyro

---

**BERLIN ANILINE WORKS, 213-215 Water Street, New York City**

## "DD MEN GATHER GRAPES OF THORNS, OR FIGS OF THISTLES?"

"To achieve surpassing quality in the print—it is imperative that there be surpassing quality in the negative,"

**CRAMER PLATES** surpass all others in their negative-making qualities. Their manipulation is easy—speed satisfactory—results certain—quality uniform—price low—independence unquestioned.

**G. CRAMER DRY PLATE CO.**

ST. LOUIS

NEW YORK

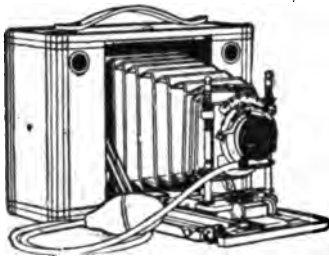
CHICAGO

## THE OBRIG CAMERA CO.

A. C. WILMERDING and W. E. WILMERDING

Telephone 4704 Cortlandt

147 FULTON STREET, just east of Broadway, NEW YORK



**TEN CENTS** in stamps will bring you a set of our new **POST CARD MASKS** (12 different openings). These are the better kind, on heavy paper, and cut true. Every printer, large or small, should own at least one set.

**MCCORMICK'S LANTERN SLIDE MATS**, 75c per 100; 85c for 25. Positively the best and most accurate lantern slide mat on the market. Once used, always used. We are sole manufacturers. Sold also by the trade at above prices.

We are headquarters for Kodaks, Century's, Premos, Graphics, Hawkeys, Eastman's Films, W. & C. Platinotype Papers. Prompt Developing and Printing at usual rates. Enlargements. Send for lists. Send name for "Down-town Topics" and our Cut Rate Catalogue

## VOIGTLAENDER LENSES



### For Pocket Kodaks

For 3 A and 4 F. P. K

DYNAR No. 3, SPECIAL \$25.00

COLLINEAR No. 3, SPECIAL 30.00

Both 6½ inch Focus.

For 4 A. F. P. K.

DYNAR No. 4 - - \$30.00

COLLINEAR No. 4 - - 49.50

NO NEW SHUTTER REQUIRED  
FIT RIGHT INTO KODAK SHUTTERS

**THE VOIGTLAENDER & SON OPTICAL CO.**

142 West Twenty-third Street, New York.

# Wollensak

## Royal Anastigmat

The Royal Anastigmats have a character of their own as regards definition and covering power, the two foundation elements of a high class lens for general work. In addition to the doublet, which is composed of two symmetrical systems, each separate system may be used by itself, giving a lens of about double the focal length as the doublet. Then the Royal Anastigmat (speed f-6.8) can be used as a doublet for the most rapid snap shots, for copying, street scenes, interior and architectural photography, where too great an angle is not required, and the single system can be employed for artistic landscape effects, long distance photography or portraiture. The mechanical and optical construction are of the highest order and every lens is sold under our guarantee to refund the purchase price if not satisfactory.

*Catalog free.*

**Wollensak Optical Co.,**  
 284 Central Avenue, Rochester, N. Y.

## The "Autopoze"

Will enable you to include yourself in the group or genre picture. Take one with you on your outing.

WRITE FOR BOOKLET

**FARIES MANUFACTURING CO.**  
 Decatur, Illinois

## Frying-Pan Clock

This is a most unique timepiece, ornamental as well as useful. It comes in two sizes—6-inch with painted figures which would cost \$2.00 delivered, and 10-inch, with raised brass figures, which would be \$2.75. With 8-day movement, \$1.00 extra. A bow of ribbon, any color, 50 cents.

*Also to Day, Calendar, Program, Electric, Synchronised and Watchman's Clocks.*

SEND FOR CATALOGUE NO. 156

**The Prentiss Clock Improvement Co.**  
 Dept. 15. 49 Day Street, New York City

## N. Y. CAMERA EXCHANGE.



50% Saved on all makes of Cameras  
 Headquarters for Buying, Selling  
 and Exchanging Cameras or Lenses.  
 Large assortment always on hand.

Developing, Printing, etc.  
 Photo supplies of every description  
 at lowest prices.

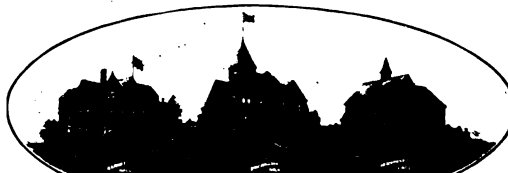
Send 2c. stamp for bargain list. Address

N. Y. CAMERA EXCHANGE, 114 Fulton St., NEW YORK

## LUXO

is the only FLASH POWDER that can be used successfully under all conditions. For sale by all dealers or the manufacturer

**W. P. BUCHANAN, 1226 Arch St., Philadelphia**



ATTEND THE

### Illinois College of Photography.

A well paying and delightful profession easily learned. Terms easy and living inexpensive. Our students win convention prizes. Good positions secured for graduates. Endorsed by the Photographers' Association of Illinois, and the International Association of Photo-engravers. Write for our illustrated Catalogue. Address

**ILLINOIS COLLEGE OF PHOTOGRAPHY, 918 Wabash Ave.**  
 L. H. BISSELL, Pres. Effingham, Ill.

Conducted in connection with the Bissell College of Photo Engraving.



## Premo Cameras

Take Films or Plates with equal facility.

They are marked by a compactness of form—an ease of operation—a certainty of exposure—the result of over twenty-five years of camera experience.

### They Make Perfect Pictures

Catalogue Mailed on Request.

Rochester Optical Co.  
58 South St. Rochester, N. Y.



## THE COMPOUND SEKTOR SHUTTER



### Made of Aluminum MAXIMUM SPEED 1-250 PART OF A SECOND

We call attention to the lightest and most compact between lens speed shutter made, which can be fitted to any modern lens Kodak or Camera.

It is dust and fool-proof. The Sektor leaves and all the working parts are made of the best steel obtainable, subject to no climatic or temperature changes.

The Compound Shutter works automatically at time, bulb and instantaneous, the other speeds are 1 second  $1/2$ ,  $1/5$ ,  $1/25$ ,  $1/50$ ,  $1/100$  and  $1/250$  part of a second.

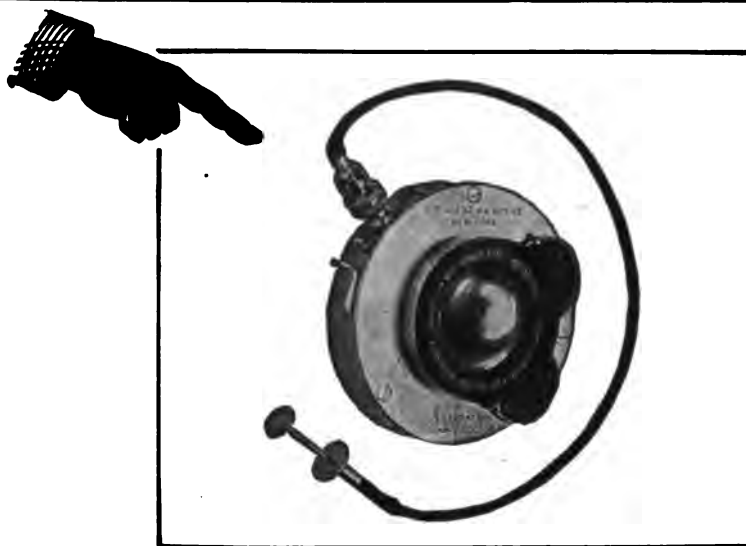
It is endorsed by all Scientists and accepted and quoted as the most accurate shutter, by EUROPE'S leading lens makers.

Our COMPOUND DOUBLE ANASTIGMAT LENS, specially made for use with this shutter, is a marvel of speed and depth.

**Ask your Dealer or send  
for descriptive catalogue**

**The  
Compound Optical Works  
154 Nassau Street  
Room 1401. Tribune Building  
NEW YORK**





## Some Pointers on Shutters

### Pointer No. 1

¶ The efficiency of a "Between-the-Lenses" Shutter is in direct proportion to the rapidity with which it opens and closes and to the time the lens remains fully open.

¶ In the XEXCELL Sector Shutter, the duration of the time required to open and close the lens is reduced to a minimum, making the XL Sector Shutter the fastest of its kind on the market.

This is true of the Sector Shutter **AT ALL SPEEDS.**

¶ The speed varies between 1 second and 1-150th of a second. Bulb, time and instantaneous exposures being obtainable with either finger or mechanical release.

¶ The XL Sector Shutter is the best Kodak and Hand Camera Shutter to be had at any price.

**TRY ONE.** We fit them for you free of charge. To be had from all dealers.

---

For Catalogue and Particulars Address **C. P. Goerz American Optical Co.**

52 Union Square, NEW YORK, and Heyworth Building, CHICAGO  
Pacific Coast Agents, Messrs. Tellman & Torka, San Francisco, Cal.

BERLIN

PARIS

LONDON

ST. PETERSBURG

VIENNA

## Not a Case of Hobson's Choice

We offer you a chance for a choice and you can rely upon our advice in buying a typewriter, because we constantly carry in stock **used, shopworn and re-built** typewriters of all recognized makes: Remington, Oliver, Yost, Blickensderfer, Densmore, Hammond, New Century, etc.—we have them all.

We can supply the firm that uses scores of machines and wants them strictly up-to-date, with all latest time-saving conveniences, and fit for the most strenuous usage; also the individual who simply wants a machine that will do nice work for years at a very moderate price.

It isn't necessary to pay \$100 for a dependable typewriter. Our prices range from \$20 up.

Write for address of nearest Branch Office, or samples of work and prices. Machines shipped on approval to responsible parties.

**Typewriter Exchange  
Department**

**American Writing Machine Co.**  
848 Broadway, New York, U. S. A.



## Cleaned Instantly

With a *wipe*, not a wash, and are as good as new. Money, time and trouble saved.

## Litholin Waterproofed Linen Collars and Cuffs.

Not celluloid, not rubber. They realize the dream of the economist and the well dressed man. Never wilt nor crack. Cost little but save much. In all the latest styles.

**Collars, 25c. each. Cuffs, per pair, 50c.**

If not in stock at your shirt store, remit to us, stating size, style, and how many, and we will mail to your address, postpaid.

*Catalogue, with cuts of styles, sent free on request.*

**THE FIBERLOID COMPANY,**  
5 Waverly Place, - New York.

No Lumps—Corners of Prints Always Stick



The Paste that Sticks—Always Fresh

## THE BEST PHOTOGRAPHIC PASTE

**A QUART FOR 10c**

All dealers. Send dealer's name and 2c stamp for Booklet and Trial Packet

**ARTHUR S. HOYT, 90P W. Broadway, New York**

## ALL PHOTOGRAPHERS

who are interested in up-to-date methods for

## BUILDING UP BUSINESS

should send for my circular of specimen ads and learn of my advertising service.

**M. F. SWIFT, The Photo Specialist,**

9½ Richard Street, - Rochester, N. Y.

When writing to Advertisers please mention the **AMERICAN AMATEUR PHOTOGRAPHER.**



*Selfo* contains the purest of chemicals in the proper proportions necessary to produce rich, velvety blacks and the purest of whites, with the finest of detail.

8 oz. bottle makes 16 oz. for regular and  
24 oz. for special papers.

**PRICE, 25 CENTS**

Sold by first-class dealers everywhere.

MADE BY

**The Selfo Chemical Co.**

Incorporated

319 SIXTH AVE., NEW YORK

ADVERTISEMENTS.

You set the **ONE Scale**, It does the rest !

# The Wynne "Infallible" Exposure Meter

THE CHOICE OF AMERICA'S FOREMOST PHOTOGRAPHERS

**NOT LIKE OTHER METERS**

Sent on Approval on Receipt of Price, - - - \$2.50

(Specify whether you want F system or U. S.)



**FOR F SYSTEM**

Nickel - - - \$2.50  
Silver - - - 5.00

The "Infallible" Shutter Speed Tester

The "Infallible" Print Meter

The "Silver Gem" (a small solid silver exposure meter for F system only)

Price \$1.50  
Price \$2.50  
Price \$3.50

YOUR DEALER HANDLES OUR GOODS

Send for our Illustrated circular and other interesting printed matter.

**THE INFALLIBLE EXPOSURE METER COMPANY, 81 Keap Street, BROOKLYN, N. Y.**



**FOR UNIFORM SYSTEM**

Nickel - - - \$2.50  
Silver - - - 5.00

## 3 A Graflex Camera



¶ A new camera of the reflecting type, which takes standard, daylight-loading roll film, no extra attachments being required.

¶ Like the regular Auto Graflex, the focusing screen shows the object to be photographed full size of plate and right-side up at the instant of exposure.

¶ The Graflex Focal Plane Shutter, which works at any speed from time to 1/1000 of a second, is also a part of this camera.

¶ The 3 A Graflex loads with regular 3 A Kodak film for photographs  $3\frac{1}{4} \times 5\frac{1}{2}$ .

3 A Graflex with Bausch & Lomb-Zeiss Tessar Lens, \$124.00

Catalog at the Dealers or

**Folmer & Schwing Co., Rochester, N. Y.**

When writing to Advertisers please mention the AMERICAN AMATEUR PHOTOGRAPHER.

# THE CAMERA CITY VIEW and STUDIO OUTFIT

(With Double Tongued Bed)  
PATENTED.



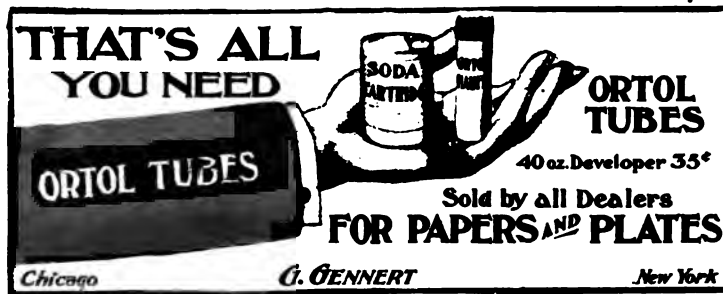
The Camera that has overcome all trade restrictions, winning popular favor in the face of fearful odds. Let us send you our new booklet telling about it.

---

---

SENECA CAMERA  
MANUFACTURING CO.  
ROCHESTER, N. Y.

# HAUFF'S READY DEVELOPERS



ORTOL TUBES - per set 35 cents

{ METOL-GLYCIN, } - each 15 cents

{ AMIDOL TUBES }

Can be mailed—or at your Dealer's—Try them

## That Brown Box with the Red Label



**CONTAINS the FASTEST PLATES made**

EASIEST TO WORK GREATEST LATITUDE FINEST GRAIN

Samples Free

**G. GENNERT** 24-26 East 13th St., New York  
55 Lake Street, Chicago, Ill.

When writing to Advertisers please mention the AMERICAN AMATEUR PHOTOGRAPHER.

**A PERMANENT SUCCESS**

# Angelo Sepia Platinum

**For over four years  
Angelo Sepia Platinum  
has been *permanently*  
establishing friends.**

***A cold developed fact.***

---

**Jos. Di Nunzio Division,  
EASTMAN KODAK CO.  
Rochester, N. Y.**



